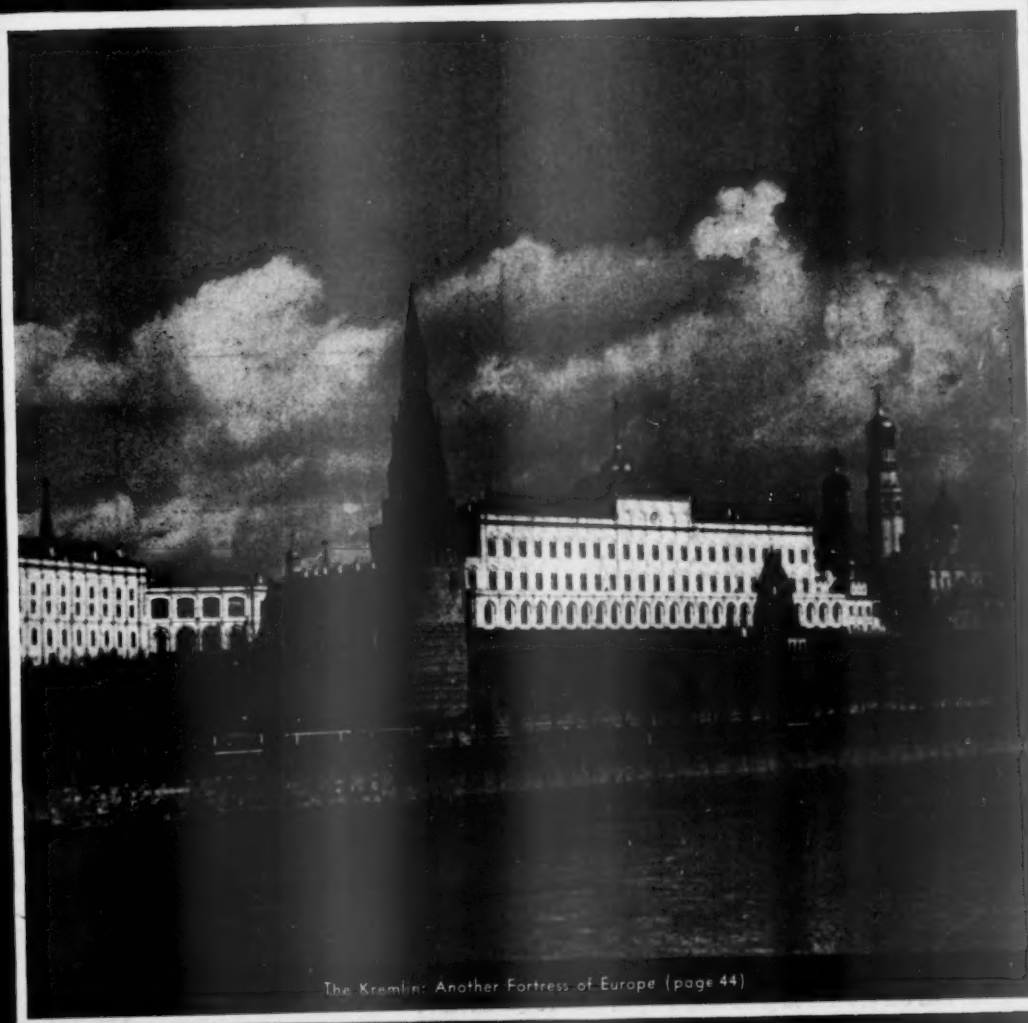


BUSINESS WEEK

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START
OF WAR
1939



The Kremlin: Another Fortress of Europe (page 44)

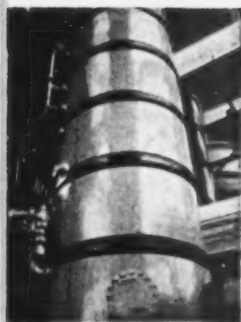
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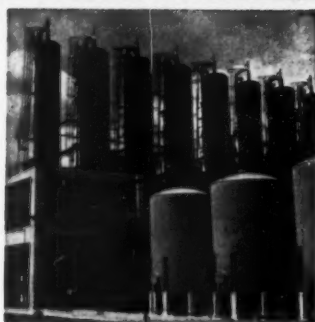
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TEN YEARS' WORK IN TWO

is the story behind Butadiene and Styrene for Synthetic Rubber



Distillation Column for Styrene



Where Distillation Columns separate and purify the Butadiene



Butadiene Storage Spheres

WE WISH YOU could see the first of the Government's large integrated synthetic rubber projects, complete at one location. What you see here is a night scene and some daytime views of the immense butadiene and styrene plants that CARBIDE AND CARBON CHEMICALS CORPORATION, a Unit of UCC, has designed and built at Institute, West Virginia, for the Government's Defense Plant Corporation and is operating for the Rubber Reserve Company.

Carbide and Carbon also has completed another butadiene plant at Louisville, Kentucky—and has released plans to Koppers United Company for a third butadiene plant near Pittsburgh, Pennsylvania.

Butadiene had never been manufactured in the United States in large quantities before the plants at Institute went into production. The task involved in providing the mass production facilities the Government asked for was an unusual one...but one that took full advantage of the experience and processes developed by Carbide and Carbon.

Generally, it requires seven to ten years for a company to take a process developed in the laboratory, put that process to test in a pilot plant, iron out production problems, design a full-size plant, and then actually build the

plant and go into mass production.

By working at top speed for twenty months—Carbide and Carbon telescoped research, development, engineering, and construction work that would have taken 10 years in normal times. In this short time laboratory research was translated through chemical engineering into larger and more modern facilities for producing the chemicals for synthetic rubber than existed anywhere else in the world.

This achievement could never have been possible had it not been for the years of research and experimentation which, prior to the emergency, Carbide and Carbon had devoted to the production of synthetic—or man-made—chemicals of the organic series.

Business men, technicians, teachers, and others are invited to send for the book "Butadiene and Styrene for Buna S Synthetic Rubber from Grain Alcohol" which explains what these plants do, and what their place is in the Government's rubber program.

BUTADIENE, (bew-to-dy-een). A highly volatile liquid which is the principal chemical in the manufacture of Buna synthetic rubbers.

STYRENE, (sty-reen). A liquid, like benzene, but having the property of reacting within itself to form a solid, clear, plastic mass. It is used as one of the principal ingredients of Buna S synthetic rubber.

BUY UNITED STATES WAR BONDS AND STAMPS

CONSTRUCTION RECORD AT INSTITUTE

June 25, 1941	Carbide and Carbon submits detailed production estimates.
July 31, 1941	Design work starts on 10,000-ton-a-year butadiene unit.
Aug. 22, 1941	Government authorizes construction.
Dec. 7, 1941	Pearl Harbor
Dec. 15, 1941	Design "frozen" for 20,000-ton-a-year alcohol-to-butadiene plant.
March, 1942	Japanese occupy Malay Peninsula and Dutch East Indies; cut off about 90 per cent of U. S. natural rubber supply.
April, 1942	Construction on the first two 20,000-ton-a-year butadiene units starts at Institute, W. Va.
July, 1942	Construction of 25,000-ton-a-year styrene plant starts.
Sept. 10, 1942	Rubber Survey (Baruch) Committee report accepted.
Jan. 29, 1943	First large-scale, alcohol-to-butadiene unit goes into operation two months ahead of schedule.
Feb. 18, 1943	First tank car of butadiene from grain alcohol shipped from Institute plant.
April 7, 1943	First styrene unit begins operation.
May 25, 1943	Fourth 20,000-ton-a-year butadiene unit begins operation at Institute plant.

UNION CARBIDE AND CARBON CORPORATION

30 East 42nd Street UCC New York 17, N. Y.

Principal Products and Units in the United States

ALLOYS AND METALS

Electro Metallurgical Company
Haynes Stellite Company
United States Vanadium Corporation

CHEMICALS

Carbide and Carbon Chemicals Corporation

ELECTRODES, CARBONS & BATTERIES

National Carbon Company, Inc.

INDUSTRIAL GASES AND CARBIDE

The Laclede Air Products Company
The Oxweld Railroad Service Company

The Prest-O-Lite Company, Inc.

PLASTICS: Bakelite Corporation • Plastic Division of Carbide and Carbon Chemicals Corporation

BANKING SERVICE FOR THE JOB AHEAD

SINCE no man can foresee how long the war will last, it is apparent that industrial management is faced with a two-fold problem. First is the paramount necessity for maximum war production to meet the needs of the armed forces. As Under-Secretary of War Patterson recently said, *"The most difficult job of all lies ahead—the drive to victory."*

Second only to meeting these vital war-production goals is the job that lies ahead in projecting plans for reconversion or production for civilian use. This job also must be faced now, if maximum post-war employment is to be assured for those at home and for the fighting men when they return.

In meeting maximum production goals, in adjusting production to changing war demands, and in planning for peace-time operations, there are many problems that require banking service. Officers of this Bank are prepared, through extensive experience in handling war-production loans and through practical study of post-war problems, to work with business executives in planning both present and future requirements. We cordially invite your inquiry.

BANKERS TRUST COMPANY

NEW



YORK



"T-I-M-B-E-R.!"

Timber indeed! Today the lumberjack's warning shout means timber for shipbuilding! For military trucks, barges, aircraft! For housing troops and war workers!

Last year the lumber industry furnished more new cross-ties to war-busy Class I railroads than in any year since 1931. Just one reason why non-military lumber supplies are now virtually shut off. By the end of this year, more than a *third* of 1943's estimated lumber consumption of 32 billion board feet will have gone exclusively into crates and boxes for America's angry torrent of fighting equipment.

To meet the immense war demands for its products, the lumber industry

is avoiding needless power interruptions in its mills. For when power fails, production stops.

Aiding many of America's lumber companies in their fight against accidents to boilers, turbines, engines and various pressure vessels is the 77-year-old Hartford Steam Boiler Inspection and Insurance Company.

Dedicated to the task, Hartford Steam Boiler and its country-wide staff of experienced engineers and inspectors are striving to detect power-machinery weakness in lumber and other mills *before* accidents can happen! Never was the assignment a more welcome duty or greater privilege!



Covers: Boilers • Pressure Vessels • Steam, Gas and Diesel Engines • Turbines • Electrical Equipment

THE HARTFORD STEAM BOILER INSPECTION AND INSURANCE COMPANY • Hartford, Connecticut

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Business Week • October 23, 1943

WASHINGTON BULLETIN

WHAT THE WASHINGTON NEWS MEANS TO MANAGEMENT

Germany Out—50% Off

Collapse of Germany—if it comes within the next year—will turn the U. S. war production program inside out.

It is the considered opinion of high Washington production and military officials that, as soon as Germany quits, the Army and Navy will cut their overall demands at least 50% below present schedules. In some lines, production will stop dead.

Unless the European war eats up more material than anybody now expects, we shall come out of it with almost enough in depots and war theatre stocks to take care of the Japanese. The odds are that the Army won't want any more tanks, bombs, artillery, or small arms. Ammunition production will be cut to a fraction of present output.

Production will concentrate largely in three lines—aircraft, ships, and signal equipment.

Some Cuts Sooner

Many of these changes will come before the fighting in Europe actually stops. As soon as production officials feel that they can set a fairly definite date on the German collapse, they will start adjusting in anticipation.

Incidentally, military authorities don't agree on how long it will take to wind up the Japanese war once we get started. One high officer, whose optimism at least is not based on ignorance, is betting that Japan will go under within a year after Germany quits.

What It Means

For war contractors, all this means new cutbacks, new changes in schedules. For the WPB, it portends more changes in personnel and policies.

As of now, however, WPB is crowding management to get better results, under threat of weeding out managers and entire staffs in plants which fail to show an improvement.

The Truman committee is backing WPB on this, feeling that the Army and Navy tend to cover up situations in which they are at least partly to blame because of bad design and bad inspection. Aircraft plants will be the first to feel the heat.

Free Speech for Management

From now on, you can look for more spirited electioneering in plant polls to determine what union, if any, holds

collective bargaining privileges under National Labor Relations Board rules.

This is one certain result of the Supreme Court's refusal to review a lower court ruling that an employer is within his rights in expressing himself about the representation choice set before his employees.

Although the high court issued no ruling in the American Tube Bending Co. case, the presumption is that the Second Circuit Court's decision was allowed to stand because of constitutional guarantees of free speech. That decision unqualifiedly sanctioned management's right to make known its views on unionism, but provided that, to be legal, such expressions must not be coercive and the company involved must abide by the election result. NLRB has long held any expression of opinion by an employer to be an unfair labor practice under the Wagner act.

Legal Battle Ahead

Not only more active propagandizing of employees by both unions and management will result from the judicial action, but further litigation is assured. The bench will be called on to write precise definitions of "coercive expressions" as organized labor seeks to limit the practical effect of this momentous employer victory.

Termination Trouble

Comptroller General Lindsay C. Warren came up to bat this week and made the most of it.

Before the House Military Affairs Committee, Warren enthusiastically elaborated on his previous statement challenging the authority and ability of the procurement agencies to handle termination of government contracts. As evidence, he cited a list of claims—ranging from false teeth for an employee to the expenses of a company barbecue—allowed by the Army as costs under

cost-plus-fixed-fee contracts, but turned down by the General Accounting Office.

The Army's answer is that you can't run a \$100,000,000,000 spending program without letting a set of false teeth slip by here and there, but it knows that won't take the curse off Warren's specific examples.

Procurement officials now expect the Comptroller General to swing the House committee, possibly even the whole House, but they count on the Senate to back them up. In the end, Congress probably will work out a compromise (page 14).

Renegotiation Unchanged

Creation of a joint price adjustment board to set renegotiation policy for all the procurement agencies may take some of the sting out of congressional criticism, but it won't make much difference to war contractors.

The Army, Navy, and Maritime Commission have been coordinating their policies informally since renegotiation started. The new board just makes it official.

Aircraft—Now

October aircraft production will be the best yet—over 8,000 planes, all of them flyaways. Extensive design changes accounted for the drop in September output. Plane production is due to pass 9,000 a month soon, but it won't hit its peak until early next summer. On a weight basis, output is scheduled to increase another 50%.

—And Postwar

Common opinion among government aircraft officials is that postwar demands for aircraft won't use more than 5% of present capacity. They figure that closing government plants will eliminate 50%. Another 25% will reconvert to other lines of production. That leaves 25% of present capacity, which will have to contract to the anticipated 5% utilization—"a very disorderly process."

Subsidy Rebellion

It will take more than a message from the President to halt the drive against food subsidies in Congress. Sentiment for the antisubsidy bill reported by the House Banking & Cur-

Other Washington reports in this issue include: A Whip to Crack?, page 14; Hard Lines to Hold, 17; Reserves Assured, 18; War Changes the U. S. Debt Picture, 19; Ceilings Approved, 77; Corn for War, 78; Shoes Stretched, 94; Without Redress, 96; Mediation Mired, 98; Incentive Guides, 102; Total Job Freeze, 108. Washington trends of importance to management are also discussed weekly in *The Outlook* and other regular departments of *Business Week*.



THE AMERICAN BRASS COMPANY, famous name in brass, in producing tubing for ship's condensers overcame a difficult lubrication problem with a Shell Industrial Lubricant.

S-T-R-E-T-C-H-I-N-G BRASS

A SOLID, CAST, BRASS BILLET is perforated and stretched 25 times its original length and becomes a flawless length of seamless tubing for a ship's condenser. The condensers of a Victory ship often require as much as 16,000 pounds... over 7 miles of tubing!

With 16,000,000 tons of new shipping to be built this year, you can readily visualize the vast quantities of tubing vitally needed for the condensers of new ships alone.

Shell contributes to The American Brass Company production by supplying the Industrial Lubricant that makes it possible to work brass into condenser tubing. To take a 2-foot billet of tough, solid brass and transform it into 50 feet of thin walled tube involves tremendous force and friction. Before each of the series of drawing operations, which are performed cold, tube

blanks, or tubes, are dipped into Shelldraw Compound.

Shelldraw Compound not only prevents metal-to-metal contact, but because of its unique cooling properties eliminates excessive expansion of both die and tubing. Size tolerances are maintained...die wear is reduced...finish is superior.

As war production sets new records, proper lubrication becomes even more vital. Yesterday's solution is seldom good enough for today.

Are you sure your plant has the benefit of all that is new in lubrication as it develops?



First oil refinery to win the Army-Navy "E"—Shell's Wood River Refinery



**Leaders in War Production rely on
SHELL INDUSTRIAL LUBRICANTS**

ney Committee is stronger now than only this summer, when the House barely sustained the President's veto of a bill less drastic than that now pending.

Despite the President's open fight to retain the subsidy program "as is," leaders who are aware of the congressional feeling are looking for some means of compromise.

War Food Administrator Marvin Jones has no illusions about the congressional sentiment and is willing to meet it part way.

While farm bloc leaders in Congress believe they could pass the pending measure over a veto, some of them also believe a slightly less drastic bill, designed primarily to end the rollback subsidies, would be a safer bet.

New Retail Price Policy

At stormy meetings held this week in OPA's New York City offices, Reagan Connally, new head of Consumer Goods Price Division, heard retailers in non-food industries recommend the same kind of a program they did before GMPR went into effect in May, 1942.

Purpose of the meetings—based on

Out on a Limb

Periodically since the beginning of the year, Business Week's Washington Bureau has offered, under the above title, its judgment on numerous issues which, in the nature of things, are uncertain.

None of its predictions has proved wrong since the score was last called (BW-Jul.31'43,p7), but, in all honesty, some are beginning to sound sour.

There's the case of Price Administrator Prentiss M. Brown. Last March, it was predicted that Brown would last. He has proved to be pretty durable, and he won't be fired. However, he may quit anytime now.

Exception may be taken to the prediction that, increasingly, as the end of the war comes into sight, State Dept. diplomacy will govern U. S. conduct of international economic affairs. We believe that, so far as over-all policies are concerned, this will remain true, but President Roosevelt has taken practical steps to assure that the policy making, which remains in the State Dept.'s hands, is realistic economically, and to prevent interference by State's personnel with the actual conduct of operations in the new Office of Foreign Economic Administration.

Some probably think July's prediction regarding the fathers' draft was wrong. That forecast said the draft would take some fathers eventually but wouldn't make anything like a clean sweep of the 3-A class; that fathers wouldn't start going in any numbers before the end of the year. Here's the situation: Of 6,559,000 3-A's, 446,000 will go by Dec. 31, 500,000 more, at the outside, next year.

Since the battle is still on, we cannot call an error on the prediction that John L. Lewis' demand for a wage-rate increase will be rejected—that the coal miners will get more money but won't be allowed special exemption from the rate-boost limits laid on labor generally. While the miners won't get a rate increase, it now seems likely that they will get most of the \$2-a-day demand as pay for more work and time.

Then there is the long-standing prediction that the farm bloc will succeed in tossing parity aside or in so altering it that it will not be an obstacle to a fur-

ther rise in prices. The only comment to add is that the politicians will never openly admit that they have dropped parity—it's too good a slogan to scrap—but the fact is that today all farm price policies are keyed to boosting food production. The point of disagreement is on the level of prices necessary to do the job, and whether the government or the consumer will pay the bill.

Standing Pat

The following predictions still stand:

No social security legislation will be enacted before the 1944 elections.

There will be only moderate increases in individual income tax rates, practically none in corporate rates.

There will be no general sales tax, but luxury taxes will be greatly extended.

Provision will be made for setting up substantial postwar conversion reserves (probably via the new tax bill rather than in renegotiation of contracts).

Congress will not repeal the law on renegotiation of war contract profits.

There will be no rationing of civilian clothing this year.

There will be no priorities on rail freight movement except in specialized equipment such as tank and refrigerator cars.

No refrigerators, washers, ironers, vacuum cleaners, and the like will be produced until well along in 1944. Production of small household items will be stepped up some in the meantime.

War production will be driven up from its present plateau (as of last July) but will be a sawtooth line until it is deliberately allowed to taper off.

A goal of 25 billions isn't out of sight for future Treasury bond drives.

New Predictions

The new predictions that follow are separated into two groups: (1) those on which the score presumably can be and will be called in the relatively near future, and (2) those on long-term issues or trends that are not susceptible to specific right-or-wrong scoring at any given time, if ever.

In the short-term category, the

following are offered as better than even bets:

There will be no horizontal increase in the price of crude oil.

Freight rate increases granted by the Interstate Commerce Commission in early 1942 but suspended last May until Dec. 31 will be further suspended, perhaps canceled altogether.

OPA will find a way to control the price of beef on the hoof without actually imposing price ceilings on live cattle.

Federal license and tax penalties on the sale of margarine will be toned down, possibly removed entirely. (The only question is whether the action will be permanent or for the duration only.)

When all is said and done, the yield from the new tax bill will not go much over \$5,000,000,000.

The controversy raging over the 1944 food program will end up in an extension of the Commodity Credit Corp.'s life, tied to permission to continue all present subsidies, plus funds for moderate extension of subsidies to hold bread and dairy products prices where they are.

For the long pull, consider these:

Plant-wide incentive wage systems will not be generally adopted by war industries.

Neither the British nor the American plan for international currency stabilization will survive in its present form. A less ambitious program eventually will be adopted by most of the United Nations, including U. S.

The Treasury's proposal for a world bank, or a recognizable modification of it, will be adopted.

John L. Lewis and the coal miners will be sitting in the 1944 A.F.L. convention. Their influence will be against Roosevelt and for raids on C.I.O. unions.

Advanced by the farm bloc to counter the Administration's food subsidy program, the food stamp proposal introduced by Sen. George Aiken (R., Vt.) will not get anywhere until the Administration picks it up as a postwar farm- and urban-relief measure.

The Connally-Smith War Labor Disputes Act will stay on the statute books, will be used by unions to legitimize strike votes, will rarely have its punitive provisions invoked by management or government.

HOW TO BE IN 38 PLACES ALL AT ONCE

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*Let us help you cut
down travel in
New York State*

☆
Business executives know a simple way to get facts and figures about business in Troy or Buffalo—or make a quick check-up in many parts of the New York State Market.

This saving of time—and travel—is possible because in 38 leading New York cities and towns there are Marine Midland banks whose officers know local conditions intimately. This means a knowledge of industry, commerce and people that constantly is proving valuable in doing business and laying future sales plans.

These men may be able to save trips for you entirely. They can most likely help you reduce your travel when space is at a premium.



The
**MARINE MIDLAND
TRUST COMPANY**
of New York

120 BROADWAY

Member Federal Deposit Insurance Corporation

WASHINGTON BULLETIN (Continued)

the premise that General Max has outlived its usefulness—was to determine whether or not it is possible to operate an over-all price regulation for all stores other than food—and, if so, what kind.

Druggists and jewelry men—both chain and independent—held out for adherence to GMPR for fear any alternative that may be adopted might squeeze them even tighter.

Other retailers found they could agree in general on a program that would encompass (1) prices based on historical formulas to protect retail profits regardless of manufacturers' prices, (2) adoption of 1942 instead of 1941 as a base period, and (3) elimination of the "no-higher-price line" limitation.

OPA, muttering about inflation threats, indicated that a compromise formula was probable. Critics, who blame failure of General Max on lack of enforcement, point out that teeth will be equally necessary to a new price policy.

Rail Strike Bluff

Strike threats by railroad union officials are part of the same old railroad game of trying to drive a better bargain with the government.

They don't mean to strike if they can help it.

This is best revealed by the fact that the nonoperating unions have assigned attorneys to re-examine the Railway Labor Act and recent executive orders to see if there is any way of going to court to press their demands for more money, thus force Economic Stabilization Director Fred M. Vinson to reinstate the 8¢-an-hour wage award which he upset on stabilization grounds (page 98).

The operating unions, awarded a 4% increase, which they consider "insulting," are just as sore but even more conservative. They will let the non-ops carry the fight.

Tire Outlook for '44

With some luck, civilians may get around 24,000,000 passenger car tires in 1944. Just when they get them depends on (1) how much the Army expands its demand for plane and truck tires, and (2) how fast the reconverted tire factories get back into production.

There will be enough rubber and cotton cord (rayon cord for heavy truck tires will be tight), but WPB will meet the requirements of the armed forces first, then take care of buses and commercial trucks.

Passenger cars are last in line.

THAT AD RUMOR

Here's the situation on the rumor that the General Accounting Office is going to crack down on advertising costs in cost-plus-fixed-fee contracts.

Advertising costs are not usually charged directly to government contracts but are entered into overhead and filter into cost by the back door. GAO headquarters has been waiting to get a clearcut case where advertising costs were charged to overhead and overhead charged to the government. As soon as it does, it intends to shoot the case right up to the Comptroller General.

So far it hasn't found a test case, not because there aren't any, but because it takes a couple of years for claims to work their way up to GAO. Audit of some of the big overhead accounts for 1941 is just beginning.

This week a story leaked out that the New York branch of GAO had issued a ruling disallowing all advertising and promotion costs. Washington headquarters was as puzzled as anybody else. The New York office is supposed to follow precedent and, if it gets a tricky case, pass it on to Washington.

Final policy won't be established until the Comptroller General hands down a decision. Before then, the Army and Navy will put up a fight for their present policy, which allows reasonable advertising expenses as charges against cost-plus-fixed-fee contracts.

Capital Gains (and Losses)

Substitution of steel for brass in cartridge cases hasn't worked out. Finished in lacquer, they scratch, corrode then split and jam the gun. Both air and ground forces in the South Pacific despise them, and Army Ordnance is going back to brass as fast as it can.

In the past 90 days, German ordnance has shown the effects of a bad pinch in materials for the first time.

One reason for condoning Russia's refusal to allow American military observers on the front was heard in a recent Washington conference with a high military official. If it did, it would have to allow Japanese military observers to get the same education.

—Business Week
Washington Bureau

FIGURES OF THE WEEK

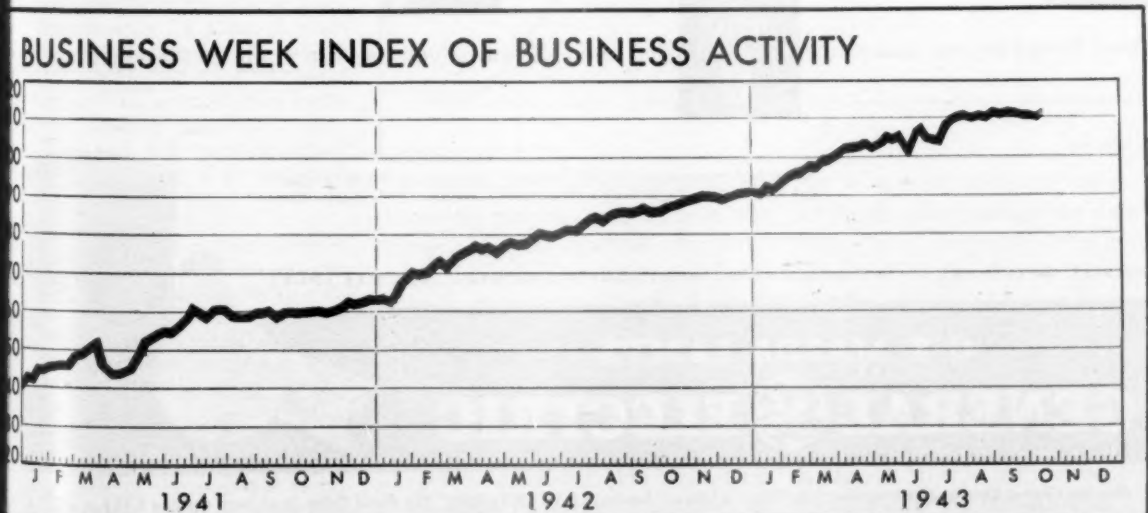
	% Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
INDEX (see chart below)	*212.3	†211.2	212.3	203.8	188.7
PRODUCTION					
Ingot Operations (% of capacity)	100.7	102.2	100.6	99.1	101.0
Production of Automobiles and Trucks	19,535	20,635	21,040	18,855	20,225
Engineering Const. Awards (Eng. News-Rec. 4-week daily av. in thousands)	\$8,838	\$9,721	\$9,285	\$13,832	\$24,529
Electric Power Output (million kilowatt-hours)	4,382	4,342	4,359	3,917	3,717
Crude Oil (daily average, 1,000 bbls.)	4,412	4,390	4,376	3,912	3,902
Bituminous Coal (daily average, 1,000 tons)	2,008	†2,016	2,031	2,067	1,943
Other Miscellaneous and L.C.L. Carloadings (daily average, 1,000 cars)	84	85	83	80	88
Other Carloadings (daily average, 1,000 cars)	67	67	67	51	64
Library in Circulation (Wednesday series, millions)	\$18,978	\$18,883	\$18,773	\$16,424	\$13,932
Department Store Sales (change from same week of preceding year)	+9%	-5%	+10%	+28%	+26%
Business Failures (Dun & Bradstreet, number)	36	42	30	89	132
PRICES (Average for the week)					
Commodity Index (Moody's, Dec. 31, 1931 = 100)	248.1	247.8	247.8	247.0	233.4
Industrial Raw Materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)	160.4	160.6	160.6	160.0	155.6
Agricultural Products (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)	217.6	217.6	216.9	208.9	185.5
Steel Composite (Steel, ton)	\$56.73	\$56.73	\$56.73	\$56.73	\$56.73
Steel Composite (Iron Age, ton)	\$19.17	\$19.17	\$19.17	\$19.17	\$19.17
Aluminum (electrolytic, Connecticut Valley, lb.)	12.000¢	12.000¢	12.000¢	12.000¢	12.000¢
Wheat (No. 2, hard winter, Kansas City, bu.)	\$1.53	\$1.50	\$1.47	\$1.37	\$1.20
Corn (raw, delivered New York, lb.)	3.74¢	3.74¢	3.74¢	3.74¢	3.74¢
Cotton (middling, ten designated markets, lb.)	20.31¢	20.43¢	20.48¢	21.13¢	18.96¢
Wool (New York, lb.)	\$1.353	\$1.363	\$1.365	\$1.332	\$1.240
Beef (ribbed smoked sheets, New York, lb.)	22.50¢	22.50¢	22.50¢	22.50¢	22.50¢
FINANCIAL					
Stocks, Price Index (Standard & Poor's Corp.)	94.2	93.0	96.6	90.3	74.5
High Grade Corporate Bond Yield (30 Baa issues, Moody's)	3.81%	3.83%	3.83%	3.97%	4.24%
Low Grade Corporate Bond Yield (30 Aaa issues, Moody's)	2.69%	2.70%	2.70%	2.76%	2.80%
U. S. Bond Yield (average of all taxable issues due or callable after twelve years)	2.30%	2.30%	2.30%	2.32%	2.33%
Loans Renewal Rate, N. Y. Stock Exchange (daily average)	1.00%	1.00%	1.00%	1.00%	1.00%
Commercial Paper, 4-to-6 months, N. Y. City (prevailing rate)	1-1/4%	1-1/4%	1-1/4%	1-1/4%	1-1/4%
BANKING (Millions of dollars)					
Bank Deposits Adjusted, reporting member banks	30,742	30,322	32,871	33,004	28,183
Bank Loans and Investments, reporting member banks	51,648	51,278	49,393	42,250	35,908
Commercial and Agricultural Loans, reporting member banks	6,318	6,277	5,992	5,806	6,623
Real Estate Loans, reporting member banks	3,057	3,210	2,319	1,168	802
U. S. Gov't and Gov't Guaranteed Obligations Held, reporting member banks	36,698	36,215	35,584	29,475	22,149
U. S. Securities Held, reporting member banks	2,941	2,946	2,953	3,211	3,495
Reserves, all member banks (Wednesday series)	1,610	1,700	2,050	2,147	2,713
Total Federal Reserve Credit Outstanding (Wednesday series)	9,362	9,775	10,315	7,104	4,042

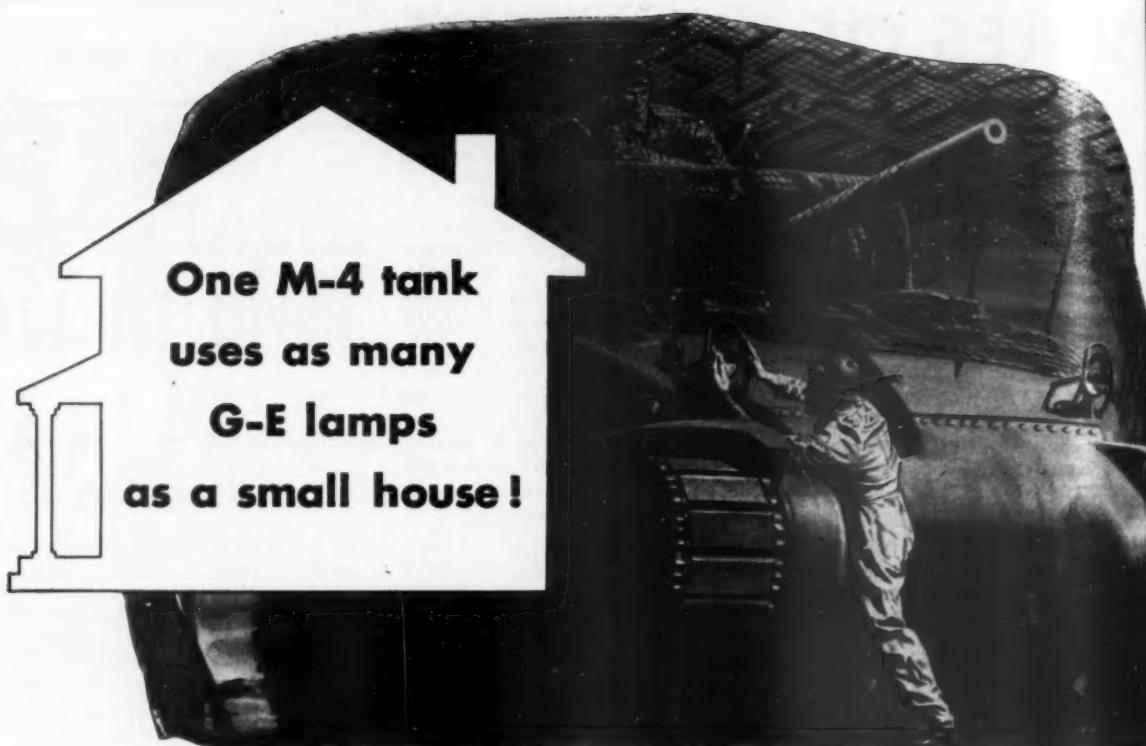
Primary, week ended October 16th.

† Revised.

Fig. fixed by government.

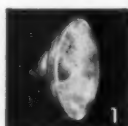
§ Date for "Latest Week" on each series on request.





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THE OUTLOOK

War Program Dilemma

It's a question of how to achieve the needed gains at points without taking losses on the anti-inflation line—a question that will continue through reconversion.

Inflation issues returned to the out- this week, but with renewed em- on their connection with pro- tion problems. Increasingly, the sion is how to escape from the ma of whether to make a sacrifice the production line or at the anti- tion line.

and Incentives Needed

Thus, in the President's food mes- , subsidy questions were inextricably ed with 1944 production goals. For e time, it has been clear that shifts eed, livestock, and food crop needs d require changed incentives for culture (BW-Jul.3'43,p13)—subsi- or price boosts.

The dairymen's higher feed and or costs are already being subsidized the tune of \$250,000,000 annually, order to sustain milk production. e recent sharp rise in wheat prices to permitted parity level is wiping out r millers' margins. Today's issue is e simply one of a demand for price ps all along the line, but rather one a need for key differentials to spur put.

The same need is indicated—though a e less clearly—on the labor front e 15). How acute coal shortages e in 1944 (page 16) depends in t on how many workers leave the es and how much efficiency is im- ed by disaffection with existing con- et rates.

The railroads present a similar situa- n. Employment on Class I roads pped, contra-seasonally, by 9,000 rkers in August and by 5,000 again September; also, agitation over a new tract is wasting man-hours. Cer- nly, coal and rail operators could ter hold their labor if it were paid e; and per-man output would be roved.

So, economically, incentives must be aged. The Administration program o do this without boosting living costs. eaking "Little Steel" is to pay mers subsidies and labor overtime. e political question is whether farm d labor groups will go along.

Long-Term Influence

Naturally, the longer-term outlook r prices through the war and recon- sion will partly hinge on what hap-

pens now. But continuance of the up- ward pressure—but not necessarily an upward trend—is clear.

Food prospects for 1944 and 1945 are already shaping up (BW-Oct.16'43, p19). Exhaustion of feed stocks and normal weather will limit output of meat, dairy, and poultry products—big- gest items in the food budget—to ap- proximately 1943 levels. Civilian sup- plies first will shrink further, to meet military and lend-lease needs, then ex- pand slowly as these requirements de- cline some time after the end of the war.

At present, current prices of these products are being held by ceilings be- low the level that supply and demand would determine in a free market. If national income is fairly well sustained through the reconversion, demand will

still exceed supply. Living costs will at best hold up and will rise if price con- trols are eased. Implications for wages are obvious.

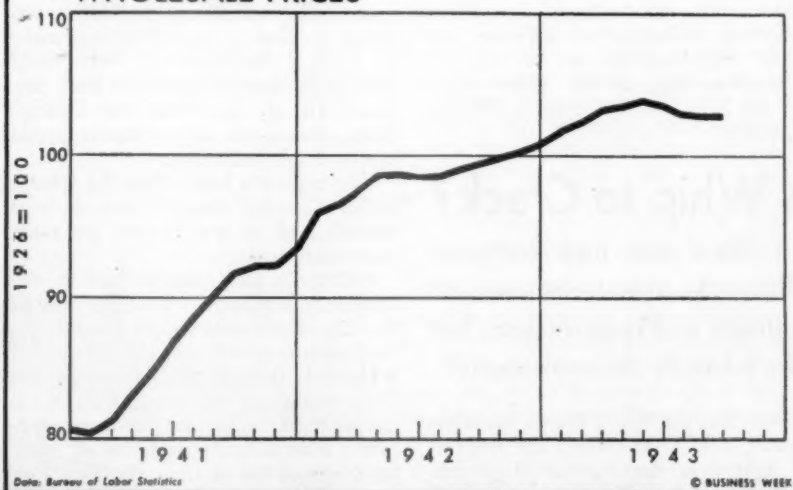
Aside from food itself, price difficul- ties generally will be compounded by a production snag which Business Week has termed "the real reconversion prob- lem" (BW-Jun.26'43,p116) and which Arthur D. Whiteside, head of the Office of Civilian Requirements, pointed up this week: "It must be obvious that there will be a postwar tightening of all but the heavy goods."

"Soft Goods" Problem

Output of "soft goods"—textiles, paper, coal, shoes (page 94), etc.—in- creasingly is being limited or actually curtailed by the manpower shortage, while accumulated inventories are fast being exhausted. Yet these are the very goods most needed for foreign relief after victory; also, because they are cur- rently consumed by the armed forces, military demand cannot be quickly re- duced.

So, on the one hand, civilian supplies of "soft goods" in general may con-

IN THE OUTLOOK:
WHOLESALE PRICES



The slight easing in wholesale prices during the summer resulted from the strengthening of controls over farm prices, including the use of rollback subsidies on meat and butter. Indeed, all movements in the curve since the prize freeze in May, 1942, reflect changes in farm and food quotations; industrial prices have inched up but 1% since then; before that, both sets of prices advanced, the farm-food group much the faster. Altogether, in

the 16 months since the freeze, the wholesale price average has risen less than 5%, as compared with a jump of almost 25% in the preceding 16 months. Right now, key labor and farm issues are again coming to the fore, and industrial prices would tend to be more sensitive than in the past to any boosts in wages or farm prices. But in any event, the outlook is for relative stability in the wholesale price level, at least for the duration.

tract, rather than expand, putting more pressure on their prices from excess purchasing power. And, on the other hand, the much-needed shiftover of manpower to these lines might require wage increases, which would also lift prices.

War and Home Fronts

Immediate implications of the opening of the Moscow conferences this week (page 44) were overshadowed by the Russian breakthrough of the German Dnepr line, termed by some the "blackest" news of the war for the Nazis. For the thrust threatens entrapment of German forces in the south.

At home, munitions output lagged in September, after the sharp gain in August. Extension of West Coast manpower controls was forecast by the WPB classification of Detroit, Akron, and Hartford as "urgency" areas, in which "production urgency committees" are to be set up, preliminary to the institution of centralized hiring.

While the strain to push up war output requires tightened controls, the end of the war (of the German phase, at least) comes ever nearer. This cross current now dominates the outlook, in ever more phases, ever more forcefully.

This week the Board of Governors of the Federal Reserve System brought out the expected revision of its index of industrial production, due primarily to the broadening of the measurement of war production in the chemicals, machinery, and transportation equipment industries. Whereas the old index figure for July production was 203% of the 1935-39 average, the new index shows 239 for July, 241 for August, 243 for September.

A Whip to Crack?

New unit may compose differences over termination of contracts and reconversion, but who'll handle the settlements?

Now that the White House has taken a hand, it looks as though the free-for-all fight over termination of government contracts will end in a series of compromises.

• **New Policy Unit**—Acting on the President's orders, War Mobilization Director James F. Byrnes has just set up a new unit to work out policies for termination and postwar conversion.

Procurement officers think that with OWM cracking the whip, the services at last will get together and agree on the uniform termination policy they have been kicking around since the start of the war.

• **Job for Congress**—Although establishment of the new OWM unit will sim-

plify things, it won't solve the big problem of whether settlements on canceled contracts shall be handled by the procurement agencies or by the General Accounting Office. That is still a job for Congress.

Until a few weeks ago, the services were making termination payments on their own, assuming that their legal authority to make contracts gave them power to settle up when they canceled an order. Comptroller General Lindsay C. Warren kicked the props from under this theory with a letter to Congress insisting that his General Accounting Office was the only outfit with the authority to take care of claims against the government.

• **A Deeper Split**—The split between the services and the Comptroller General is something more than an ordinary consequence of departmental imperialism.

The procurement agencies are thinking primarily in terms of getting money out fast, so that contractors will have enough working capital to start reconversion to peacetime production.

GAO is thinking of the possibility of padded claims and fraudulent cost estimates that may slip past if termination settlements aren't audited like any other disbursement.

• **Compromise Spirit**—As things look now, Congress will try to straddle the fence. One proposal that appeals to a good many congressmen is to delegate GAO representatives to work with the procurement officers on termination settlements. Should the GAO man make no protest, the Army or Navy could arrange settlement and make final payment. In any case that looked suspicious, the GAO representative could call for a detailed audit.

The big hitch here is that the Comptroller General doesn't have a large enough staff to put a man on every settlement team.

Ordinarily, GAO would have no objection to expanding, but the current shortage of accountants and trained contract men may rule out the idea.

• **Central Board?**—To economize on GAO manpower and to get uniform administration, some congressmen advocate a central board made up of representatives of the services, the War Production Board, and the Comptroller General.

The board would determine policy, draw up general rules, and review contested cases. Actual settlement would be handled by procurement officers of the various services. If OWM's new unit takes hold fast, Congress may make it the central board.

Procurement officers say that Congress also will have to give them a specific grant of authority to make advance payments on termination settlements. (Debate over whether the services had the power to make advance



BALKY BUTTER BUYERS

Sorry is the grocer's lot. Just a few weeks ago butter supplies were negligible, the demand frantic. Today, with the suspension of government buying sending more into civilian channels, customers flinch at turning in 16 red ration points per pound. Cleveland, a real housewives' rebellion has grocers on the anxious side, their showcases jammed and piled (above) with butter they can't sell. Meanwhile, margarine sales (page 8) in some Cleveland stores have gone up 40% since the four-point butter increase went into effect.

payments was one of the main things that held up adoption of the uniform termination clause for government contracts.)

• **Seek Permissive Authority**—Although the services believe in advance payments, they want the grant of authority to be purely permissive, leaving them free to refuse advances in specific cases. Contractors, on the other hand, are pressing Congress to make advance payments mandatory.

The odds are that Congress will settle for a compromise on this problem. It probably won't make advances compulsory in all cases. But it is pretty sure to set up a system of mandatory "loans" for small companies and contractors who can show hardship if payment is delayed.

• **Which to Cancel?**—One problem the Congress can't handle, except in a general way, is the question of which contracts should be canceled and when. From the contractor's standpoint, this is one of the most important points of a settlement.

If OWM's new unit can handle the job, it may get most of the responsibility.

Eyes on the Coal Pile

John Lewis' case benefits from the fact that higher pay is about the only way to get the fuel, job of holding the line is made harder as result of mine and railroad cases.

This was a black week on the labor front. The rail wage controversy (page 98) threatened to undermine the authority of Fred Vinson and his Office of Economic Stabilization. The Railway Labor Act was readied for embalming. Strikes and threats of strikes harassed the war effort.

Alarmed, the President called union leaders to the White House for an extraordinary session of his Combined Labor Advisory Committee. And over the whole scene fell the portentous shadow of John L. Lewis.

• **Coal Output Suffers**—Tenacious, single-minded, the president of the United Mine Workers has kept the coal dispute moving from crisis to crisis since early last March when he first told the industry he wanted \$2 more a day for his members. Three national strikes and a series of "spontaneous" regional stoppages have kept the industry in turmoil for more than seven months.

Since the first of the year, stocks of coal have dwindled to a point where now, instead of being at their seasonal high, they approach their 1943 low (charts, page 16). Unless there is a marked improvement soon, formal rationing is inevitable.

• **Diverse Results**—Lewis' determination also has had rapidly shifting effects on government labor policy. It was directly

responsible for the passage of the Connally-Smith War Labor Disputes Act, and at the same time it induced the National War Labor Board to be more generous in finding loopholes in the Little Steel wage-freeze formula lest other labor groups emulate the Lewis tactics.

Shrewd or lucky, Lewis formulated synthetic wage demands last March that had no more economic justification than demands from other labor groups which, upon being rejected by NWLB, were abandoned. In holding fast to his own program, the miners' boss has seen war-wrought changes in domestic economy back up his demands.

• **Prescription for Men**—There is, first of all, the manpower shortage which has progressed from serious to critical within the last six months. It has pinched coal more severely than most industries, and coal is a prime war essential. This means, in effect, that men must be kept in the mines, and what Lewis wants—more money—is clearly one of the most practical ways.

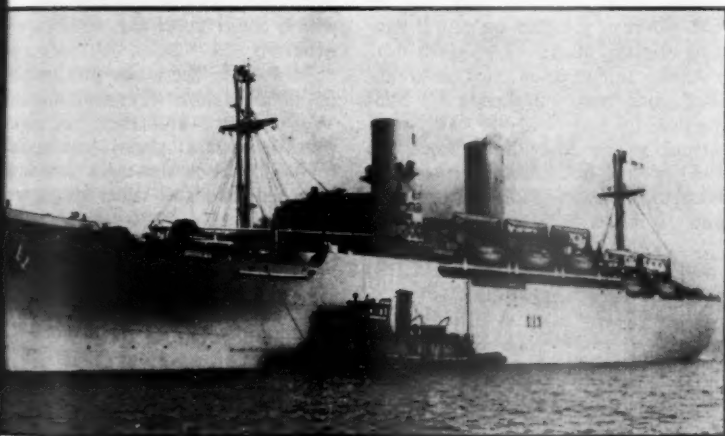
There is, second, the heat-power-steam base on which war production schedules are set, obviously requiring maximum output from every individual miner. Again the cure for discontent and half-hearted effort is the Lewis prescription—more money.

• **The Living Standard**—Another element in the dispute that helps bulwark Lewis' position is the equity of a wage boost. Whatever validity there was to the \$2 demand last March, based as it was on a standard-of-living claim, it has since grown.

To be sure, the official government cost-of-living index is only a fraction above its March level, but scarcities in cheaper lines, upgrading of consumer goods, and seven months in which hidden inflation has grown more pervasive have caused appreciable deterioration in the miners' position.

• **Conflicting Tendencies**—Put these considerations on the scale, in addition to the weight of Lewis himself and the force of another threatened national coal strike, and it can be seen that the pressure upon NWLB to let the miners have their raise, and close the coal case, becomes well-nigh irresistible.

But there has been an opposite pull on the board which has not been trivial. Over and against the prospect of a disastrous strike, coal rationing, and a crippling blow at war production—which a decision against Lewis would assure—has been the horror of abandoning the



TWAR LINER

Shipbuilding's yards at Kearny, N. J. Its features include garbage incinerators that leave no spoor for enemy submarines, all-weather air-conditioning that eliminates portholes, and a shallow-draft to permit docking at almost any port. The "specialist" is designed for easy conversion to post-war passenger runs.

ship now permits pictures of Navy's new "invasion specialist," its performance and specifications will under heavy wraps. A trans- steamer is much faster and than a Liberty ship; the largest, ever to slide from Federal

Little Steel formula. For, regardless of how the board chooses to disguise a grant of increased pay to the miners, its own previous statements have indicated unmistakably that any wage concession in coal would mean abandoning the hold-the-line position on other wage rates.

• **How to Get \$2**—This was NWLB's unhappy position on Thursday as it heard Appalachian operators' arguments against approving Lewis' latest contract with Illinois mine owners. That contract revises the present work and pay schedules for miners and provides for an 8½-hour day which will include un-

derground travel (portal-to-portal) time. The extra 1½ hours work would be compensated at \$1.75 which, added to the 25¢ a day previously awarded by NWLB for tools and lamps, would bring miners' cash gains up to Lewis' original figure.

In August (BW-Aug.28'43,p14), NWLB refused to approve a Lewis-written Illinois contract that called for a \$1.25 daily allowance for portal-to-portal time. The new agreement does not separate portal-to-portal time from additional work time, but Appalachian district operators contended that it still represents nothing more than a dis-

guised bonus for the previously lowered portal time.

• **Ickes Party to Squeeze?**—Meaning bringing advance rumblings to the question of what another rejection would mean, 22,000 Alabama miners had their pits under the traditional U.M.W. slogan: No contract, no work. Critic Secretary Harold L. Ickes' part in the controversy said that he had lent himself to a squeeze play by returning coal mines to private ownership. Under the Connally-Smith act's provision for a strike involving privately operated property is much less serious than a strike in a government-operated enterprise.

Will There Be Enough Coal?

Wildcat strikes at the coal mines this week dramatize the definite prospect of bituminous shortages in 1944.

Key to the current situation is the volume of coal in consumers' hands. Inventories have been tapped during the summer months (chart, below left) during which coal should have been stockpiled against sharp expansion in winter needs.

• **Stockpile Deficit**—Indeed, plans of the Solid Fuels Administration called for industry's building considerably larger stockpiles than last year by this time, whereas inventories now actually are down substantially. In fact, Secretary Harold L. Ickes, fuel administrator, figures the stockpile is about 30,000,000 tons under the desired level.

The series of spring strikes, of course, accounted for the bulk of this deficit. But the Solid Fuels Administration can't worry over spilled milk; its problem is the coal mines' inability to push output back to the March peak—a rate that could insure satisfaction of all demand.

• **Contract Troubles**—One reason for the production lag is dissatisfaction of labor. Efficiency has been lowered by keeping the old contract in force beyond its expiration date of Apr. 1,

instead of negotiating a new pact.

Output might be raised by lengthening the work week from 42 to 48 hours. But such a step wouldn't bring a commensurate gain because of resultant fatigue and absenteeism.

The real crux of the labor situation is continual shrinkage of the total labor force along with a decline in efficiency of remaining labor. The armed forces and war plants have drained off the youngest, best workers. The net loss since Pearl Harbor is 17% or 77,000 bituminous miners.

• **Analysis of Prospects**—Ickes sums up prospects this way: "It is currently estimated that 1944 coal requirements will be 620,000,000 tons. If present trends . . . continue, the industry will not be able to produce as much coal in 1944 as in 1943." (1943 will be well under 600,000,000.)

The actual outlook may not be that gloomy. Current output is running slightly above 12,000,000 tons a week. If sustained, and assuming that work went on during all holidays, as is not now the case, such output would just about meet the 1944 goal of 620,000,000 tons.

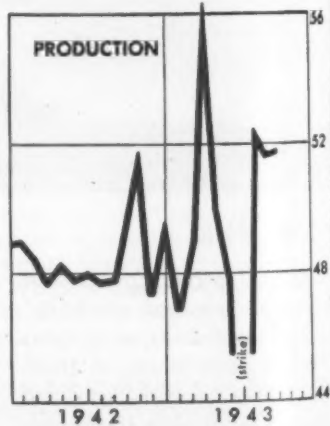
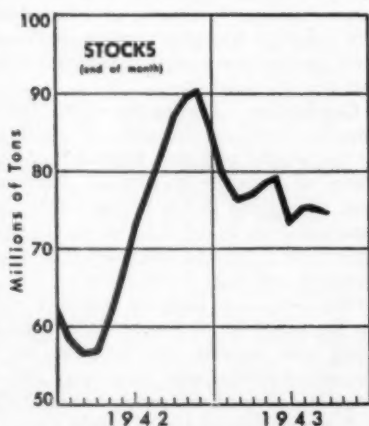
• **Labor Factors**—Industry opinion now is that a new contract and

longer hours—a combination embodied, for example, in the most recent Illinois test agreement—would lift the output rate by 4% to 8% with the absolute maximum put at about 675,000,000 tons.

If, on the other hand, the manpower drain were to continue and all other factors remained the same, production might drop as low as 560,000,000 tons. However, Selective Service inductions are slackening, and growing overtime pay in the coal mines is offsetting the high pay rates in war plants.

• **Subsidiary Problems**—In addition to the broad production problem, coal has several subsidiary worries. For example, Ickes' estimate of 620,000,000 tons needed in 1944 allows for customary exports to Canada, but it includes nothing more than an admittedly "conservative" guess for lend-lease and foreign relief—factors which could upset the whole supply situation.

Moreover, there are pinches now in some regions (Pennsylvania and Washington), and there are shortages in certain grades (coking coal for steel). Such shortages promise to be intensified and wider spread next year.



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Business Week • October 23, 1943

General News • 17

Line to Hold

Administration won't give prices and wages (at least, much), and OPA's position is viable despite shifts.

The Administration's own administration price and wage control program is at the crossroads.

President is preparing to come up with Congress on subsidies—er, and to what extent, they be used to hold food prices down the return to the farmer goes up.

National War Labor Board is still on its almost certain approval of Illinois coal agreement (page 15) would give John L. Lewis' coal an extra \$1.75 a day, blasting a

the wage stabilization program. Special Explanation—Economic Station Director Fred M. Vinson

led up the crisis this week:

The cost-of-living index dropped 125.1 in May, 1943, to 123.2 in June. If the cost of living should continue to move as it did in those months, next May the cost of living would be down to 117.8, the level of September, 1942. That is the level set by the President and Congress for the goal of stabilization of prices.

On the other hand, if the cost of living were to begin rising again, at the rate it did from September, 1942, to May of this year, the index would surge to 131 by next May."

relatively Firm Stand—Implicit in the President's statement, put out in an Office of War Information release, is a neatly documented with a chart showing where the c. of l. can go from here (chart, below), is the Administration's intention to continue to hold the line. Behind this intention is the President's conviction that, by fighting a delaying action on all major price and wage issues, he can maintain the line—at least a semblance of it—until after the war.

The Administration also has its eye on an end to the fighting in Europe in figuring its strategy on price control. This explains the President's reluctance openly to retreat to a defensive position—a position that, allowing prices and wages to advance another notch, would temporarily relieve the pressure.

How Much Subsidy?—By recommitting itself to holding the line, the Administration is automatically let in for the fight of its life on subsidies. The Office of Price Administration—which has dreamed of subsidies totaling two, three, or even ten billion dollars to stem rising prices—now hopes that Congress will vote even a billion dollars without too many strings attached.

OPA economists believe that this much subsidy money spread thin (used to make life easier for high-cost producers instead of blanketing an industry like the present meat and butter subsidies) plus further judicious squeezing of margins and profits will make it possible to keep prices about where they are now for another year.

● Familiar Troubles—Meanwhile, OPA is finding its job as the Administration's whipping boy tougher and tougher. Business and the press, figuring that the new "business man" regime which Congress legislated into OPA last summer has had a long enough period of grace, are beginning to grumble.

General Manager Chester Bowles and his aides are stubbing their toes on the same snags that upset Leon Henderson and Kenneth Galbraith. To the extent that business and the man-on-the-street believe that their hearts are in the right place, they have a greater immunity to personal criticism.

● Heads Begin to Roll—As evidence of the trouble in paradise, James F. King, appointed by Bowles as OPA's information chief last August, was out of a job this week. James C. Rogers, assistant general manager and Bowles' alter ego, will take over the post temporarily, and OPA officials are speculating as to how long Reagan P. Connally, chief of the new consumer goods division, will last.

Moreover, as business men take hold in policy making positions there are rumblings of disagreement on fundamental issues between the administrative staff and the agency's braintrust—the economists and researchers, most of whom were Henderson and Galbraith protégés. Thus far, Bowles and James Brownlee, OPA price chief, have the confidence of both sides.

● Better Feeling—In spite of these irritations, OPA now presents a better united front than it has for a good many months. Bowles has had at least partial success in achieving an atmos-

phere more cordial to business. For the first time, OPA's business advisory committees are being consulted before—not after—orders are drawn up.

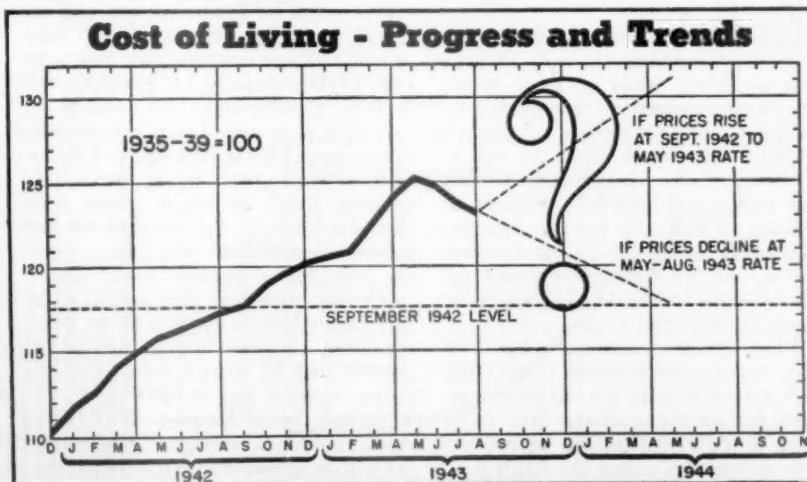
The emphasis on compliance, rather than enforcement, is making OPA less loathsome to both big and small merchants. Similarly, OPA is now getting along somewhat better with other government agencies, notably the War Food Administration and WPB's Office of Civilian Requirements.

● Action on Ceilings—Bowles has seen to it that the consumer is not forgotten. OPA price panels and community ceilings are being extended. As the new fresh fruit and vegetable price program indicates (page 77), Bowles and Brownlee are going to plump for dollar-and-cents retail ceilings wherever possible.

But none of these changes is fundamental. Except for the elimination of grade labeling and the toning down of standardization (and these were knocked out by Congress), none of the major price orders has undergone any basic changes since Bowles came in. And business is beginning to suspect that as long as OPA is holding the Administration's line, none of them is likely to.

● Trouble in Textiles—On food pricing, OPA figures that—with a little subsidy money—it can squeak by, or at least be no worse off than it has been for some time. But its hottest problem right now is textiles, and no subsidies are likely to be forthcoming to ease the squeeze here. Trouble with textiles is that, as one business man puts it, "OPA is pricing goods that are no longer there."

The squeeze of ceilings on low-end textiles has driven manufacturers into higher and higher price lines until shortages in sheets, work gloves, boys' overalls, knit underwear, and virtually all types of infants' wear are now breeding faster than fruit flies. Distributors have been caught between these shortages and commodity orders like the famous MPR 330 which prevents retailers from in-



Which way living costs? A question pictured in an Office of War Information chart as the Administration fights a delaying action on wage and price issues.



ROTARY "FLIVVER"

Helicopter No. 1 is Igor Sikorsky's; No. 2 is the Platt-LePage model, reported out of commission due to an accident. Now listed as No. 3 is a 1,000-lb. "flivver" model which demonstrates its hovering ability (above) at Washington National Airport. The pilot is Frank N. Piasecki, president of

P-V Engineering Forum—a helicopter company backed somewhat by Pennsylvania-Central Airlines. Design includes such features as a 25-ft. rotor spread with a "cyclic" pitch that's easily changed for lateral, forward, or backward flight and a four-cylinder opposed engine. The craft cruises at 65 m.p.h. and carries only one person and gas enough for two hours' flight.

creasing prices on old lines or adding new and higher price lines of women's and children's wear (BW—Sep. 25 '43, p92).

• **Some Increases Allowed**—To ease the pinch, OPA has been sparingly allowing price increases. Most of these boosts have been confined to manufacturers, but last week OPA allowed an increase (on boys' big overalls) clear through to the retail level. Assumption is that some high priced lines will eventually be trimmed to make up for the increases on low-end merchandise. But this policy has not yet received Vinson's approval (BW—Oct. 16 '43, p7), won't be widely applied until it does.

What retailers want—and what Connally, as consumer goods chief, has promised them—is an over-all price regulation for all stores (other than food) which would assimilate the various irksome commodity orders like MPR 330. In New York City this week, Connally met with retailers to see what they had to suggest. Retailers came to the meet-

ing to see what Connally had to suggest.

• **A Tentative Plan**—In the back of the OPA's mind is a scheme whereby retailers would be allowed to take their over-all, average markups for a base year (say, 1941) and apply it to present costs. A store could exceed the markup on one item if it undercut it on another, averaging out to the base figure. On certain essential "cost-of-living" items (presumably those on which prices must now be posted), the amount of the markup would be limited, giving a ceiling price which no store could exceed.

Trouble with this plan is that OPA can't figure how to apply it to the small merchant (whose accounting is so sketchy that he doesn't know what his average markup was in 1941).

• **Needed: Some Support**—What OPA really wants is enough congressional support to enable it to tell business that its hands are tied because it is carrying out a mandate from the people. Price officials are somewhat encouraged be-

cause congressmen, who went to the damming OPA and all its works, find their constituents as mad as they were, and consequently came home somewhat mollified. OPA has been acutely conscious of the weakness of its position in constantly telling business that it is holding a line the President forced out of Congress.

While OPA held tight and prayed for help, an old storm warning raised again this week: The report that food pricing and rationing would be taken away from OPA, lumped with food production and distribution in the War Food Administration, was received.

Reserves Assure

How to go about it is still a puzzle, but Congress intends to include provision for postwar conversion in the tax bill.

No matter what Congress may decide about the rest of the 1943 tax bill, it intends to write in some sort of exemption for corporate reserves to cover postwar conversion costs. The trouble is that as yet nobody in Congress has any very clear idea of how to go about it.

• **Present System Knocked**—Businessmen testifying at the Ways & Means Committee hearings have been hammering away at the present system of handling reserves. So far, they haven't met much opposition, but the real fight won't start until the committee gets down to the specific question of what changes it should make.

Unless the committee discovers an easy compromise, postwar reserves will be one of the hottest points in the debate over the new tax bill.

• **Hard to Estimate**—Most of the trouble is that corporations know they are going to run into heavy expenses after the war but can't estimate how much they will be.

Some postwar costs properly should be charged to wartime income, but present tax laws allow no current deductions for expenses that can't be estimated accurately when the returns are filed.

Consequently, most corporations are now paying taxes on income that later will be mopped up by conversion costs, dismissal wages, and similar postwar outlays.

With taxes running up to 80% of net income, a good many corporations say that they can't salt down enough to meet their postwar expenses. They are afraid that once they stop working on government orders, they won't have enough in the till to get them started in peacetime business again.

• **Tax Deduction**—Of the dozen or more solutions offered, the one that

to most business men is to allow
 for postwar expenses as a tax
 deduction. The idea is that corpora-
 tions would earmark part of their in-
 come for a postwar reserve, either allo-
 cating it to specific items or leaving it
 in a general pool.

When conversion expenses come up,
 they would be charged against the re-
 serve instead of against current income.
 If the postwar economy had had
 to shake down, any unused re-
 serve would be closed into the income
 account and taxed at the rates that
 would have applied in the year they
 were set up.

With Strings—Congress, however,
 wants to make sure that the reserves
 are used for postwar expenses and not
 dumped into the company's gen-

eral cash account. If it allows current
 deduction of reserves, it probably will
 attach a series of strings, like allocating
 them to specific expenses. Corpora-
 tions don't like this because it is im-
 possible to tell anything about the na-
 ture and size of postwar costs.

• **The Treasury's Contributions**—In the
 midst of the general debate over taxes,
 the Treasury has made two contribu-
 tions: (1) a proposal that looks like a
 Ruml plan for corporations entitled to
 tax refunds under the carry-back pro-
 visions of the present law; (2) a weighty
 study of postwar expenses related to
 wartime income.

The carry-back provisions are among
 the big question marks in the present
 tax picture. Some business men think
 they are too good to be true and fear

that they will be repealed. Others con-
 sider them worthless.

• **What the Law Allows**—Actually, the
 present tax law permits two different
 kinds of carry-back or recomputation of
 one year's taxes in the light of the next
 year's income. A corporation which
 does not use all its excess profits tax
 credit in any year can carry back the
 unused part for two years, adding it to
 the credit it had in the recalculated
 years and reducing the tax correspond-
 ingly.

Similarly, a company that has a
 deficit in any year can refigure its taxes
 for the two preceding years, subtracting
 the deficit from taxable income.

• **How It's Juggled**—Take for example
 a company that had \$2,000,000 net in-
 come in 1943 with an excess profits tax

War Changes the U. S. Debt Picture

Treasury borrowing policy is lean-
 ing more and more on corporations
 and insurance companies, somewhat
 less on the commercial banks. The
 breakdown of sales during the Third
 War Loan Drive, released this week,
 shows that corporations took \$7,915,-
 000,000 of the \$18,943,000,000
 total. Insurance companies and mu-
 tual savings banks accounted for an-
 other \$4,127,000,000.

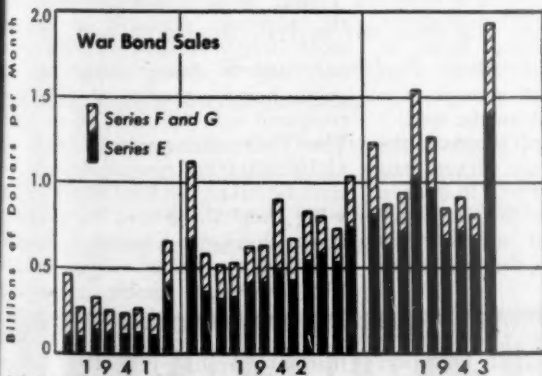
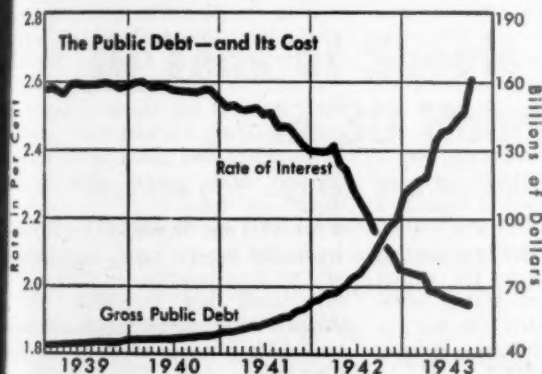
Commercial banks still carry a
 large part of the load of Treasury
 financing. Although they made no

direct subscriptions in this drive,
 they put about \$3,000,000,000 into
 the money market through open-
 market purchases and loans to deal-
 ers. Before the end of the year, they
 will lend the Treasury about \$3,000,-
 000,000 more on direct subscription.

Since the first of the year, how-
 ever, the increase in bank portfolios
 has lost speed (chart, lower right). In-
 creased purchases by individuals have
 taken some pressure off banks, but
 the big factor is sales to insurance
 companies and corporations.

On the inflation balance sheet, pur-
 chases by institutional investors
 count as neutral. Since they repre-
 sent money that would not be spent
 for consumer goods in any case, they
 neither increase nor decrease con-
 sumer purchasing power.

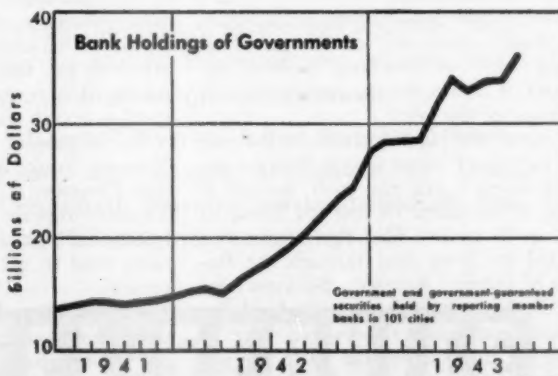
From the inflation standpoint,
 the best thing about the last drive
 was the all-time record for Series E
 war bond sales—\$2,472,000,000 in-
 cluding sales through Oct. 16 (the
 chart, lower left, shows September
 sales only)



Source: U. S. Treasury, Federal Reserve Board.

Issue	Individuals	Insurance Companies & Mutual Savings Banks	Other Corporations, Associations & Investors	Dealers & Brokers	Total
E Bonds.....	2,472	2,472
F and G Bonds	565	5	261	*	831
Savings Notes	193	2	2,288	*	2,483
Certificates ..	366	255	3,177	322	4,120
2% Bonds....	1,220	1,926	1,483	480	5,109
2½% Bonds..	561	1,939	706	92	3,298
Total.....	5,377	4,127	7,915	894	18,313

* Less than \$500,000.



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STEVENS' RETURN

Chicago's Stevens Hotel is a beehive as maids unscramble remnants of furniture, and workmen rush refurbishing to reopen it as a hostelry on Nov. 1. After 13 months as an Air Forces

training school, the "world's biggest" requires plenty of housework. Its new host, Arnold S. Kirkeby, who paid the Army \$5,251,000 for the Stevens (BW—Sep. 18'43, p32), hopes to have half the 3,000 rooms ready for occupancy when the doors are opened.

credit of \$1,000,000. It paid normal and surtaxes (40%) of \$400,000 and excess profits taxes (81% net of postwar credit) of \$810,000, making a total of \$1,210,000.

If in 1945 this company just breaks even, it can take the unused excess profits tax credit for 1945 and add it to the 1943 credit. The picture then would be net income \$2,000,000, excess profits tax credit \$2,000,000, normal and surtax \$800,000, excess profits tax zero. The company would then get a \$410,000 refund.

If the company lost say \$1,000,000 in 1945, it could reopen the 1943 return and deduct the loss from net income. The income statement then would show 1943 income \$1,000,000 (\$2,000,000 net less the \$1,000,000 carry-back), excess profits tax credit \$1,000,000, normal and surtax \$400,000, excess profits tax zero. The refund would be \$810,000.

• **Most of the Job**—Although the Treasury hasn't come out solidly against all other ways of handling postwar expenses, it thinks the tax carry-backs will do most of the job.

One of the big objections to the way the carry-back works now is that a company doesn't get any cash out of it until it has taken its loss (or failed to use up its credit), filed the return, and waited for it to clear through the Bureau of Internal Revenue. Business men say if they counted on tax refunds to finance conversion they would have to close up their plants and leave the job to their grandchildren.

This is where the Treasury's "Rum

plan" for corporations comes in. As outlined by Randolph Paul, Treasury tax expert, this plan would let corporations file a tentative estimate of anticipated losses as soon as they see a bad year coming.

If this goes through, companies will file application for refund on a tentative basis along with their regular returns on the previous year's income. Then they could offset the refund against taxes due and keep the difference to meet expenses.

• **Good As Cash**—For example, say a corporation owes \$1,000,000 taxes on 1944 income, but in 1945 it foresees a loss that will entitle it to a \$750,000 refund. Under the Treasury's plan, it would be able to apply for the refund when it files its return in March, 1945, hold back \$750,000 out of the reserves accumulated to pay 1944 taxes, and pay the Treasury only \$250,000.

The strength of this plan is that it takes advantage of the fact that all corporations accumulate heavy liquid reserves to pay their taxes. Hence, a tax rebate, if it comes quick enough, is as good as a cash payment on the spot.

In its current refund proposal, the Treasury thinks it has one idea at least that Congress will support. If it does, Treasury experts think the carry-back system will be all that most corporations need to get them through reconversion.

• **Specific Items Listed**—On other proposals for handling reserves, the Treasury is somewhat dubious. Its big report (which will tend to become a handbook for both sides as the argument warms

up) lists various expenses that might be charged to wartime income, either specific tax carry-back or by setting up reserves.

Dismissal wages, deferred maintenance, direct reconversion costs, in Treasury's opinion, are legitimate charges against war income. Inventory losses and obsolescence of facilities inventories are borderline.

Expenses of opening new markets, getting into a new line of products, are not recognized as having any relation to war income and consequently no claim to deduction from corporate taxes.

• **Long Road Ahead**—Even when a charge against income is legitimate, Treasury points out that it is often impossible to estimate it. Deferred maintenance, for example, is a sound concept theoretically, but a statistician can't give any estimate of it he likes by choosing an accommodating formula. So the company has a long road ahead before Congress arrives at a practical solution of the postwar reserve problem.

Tools of Peace

Their wartime jobs done or accounted for, the makers of machine tools look ahead to the postwar world of industry.

Having completed its major job of tooling up American factories for production, the machine tool industry in convention at Chicago last week was left no doubt regarding its immediate task. It has ahead a twofold program: building machine tools yet needed by ourselves and allies; using its excess capacity and special skills to make direct war items.

• **An All-Time Record**—The first industry to feel the war prod, it climbed rapidly to dizzy heights. It reached a time peak last December when it shipped over \$130,000,000 of machine tools. That was seven times the peacetime high.

Since then, it has descended from the pinnacle, gradually at first and more steeply recently. It lost ground only slightly during September, shipments being estimated at \$85,000,000 compared with \$87,000,000 in August. The 1943 total promises to be over \$1,100,000,000 compared with the record-breaking \$1,360,000,000 in 1942.

• **Big Drop Ahead**—But the production curve ahead is definitely downgraded. Next year's estimated volume looks like \$325,000,000, a tumble to one-fourth the industry's present capacity. It is still, however, more than 50% greater than any peacetime year. Readjustment now under way conform to the industry's shrinking business. Two shifts at

RYERSON STEEL RACES ACROSS COUNTRY



10 Tons of Sheets Delivered 700 Miles in 30 Hours 20 Minutes

It is 4:10 P.M.—a truck with ten tons of sheet steel pulls away from the Ryerson Chicago plant. In a Western war factory 700 miles away, important production for Army invasion equipment is waiting.

Flying the ODT "Emergency Flags" with special permission to travel at 60 miles an hour, the shipment arrives the next day at 11:30 P.M.—just 30 hours and 20 minutes after the order was dispatched.

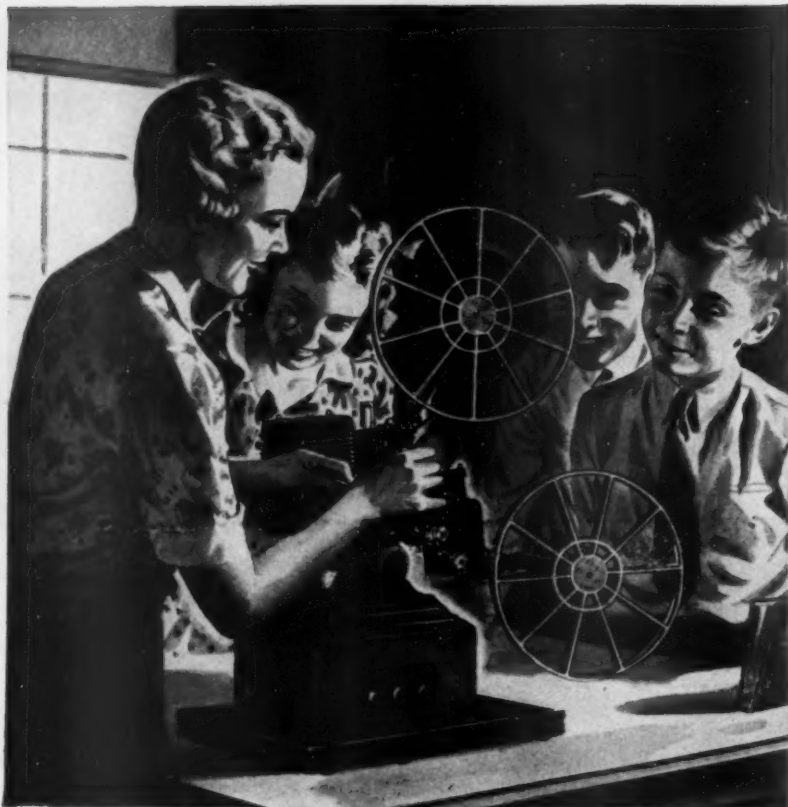
Two significant facts: The sheets so urgently needed were in Ryerson stock for immediate shipment. And Ryerson facilities and service measured up to the emergency.

Unusual? No! This order is only one of many Ryerson emergency shipments that are preventing production shut-downs in these critical times. Every day, Ryerson skill and experience are expediting deliveries of vital steel.

Next time you need steel in a hurry, whether it is sheets, plates, bars or beams—we urge you to call the nearest of the ten Ryerson Steel-Service plants. Whatever you require, you'll get prompt, effective cooperation.

Joseph T. Ryerson & Son, Inc., Steel-Service plants at: Chicago, Milwaukee, St. Louis, Cincinnati, Detroit, Cleveland, Buffalo, Boston, Philadelphia, Jersey City.

RYERSON STEEL-SERVICE



"You children are going to hear the music and voices of these people too!"

IN THOSE DAYS YOU DIDN'T CALL IT

"Electronics"



... but the first alternating current amplifier for 16mm. sound-on-film was just as startling in its time as the electronic war-wonders of today. It gave visual education and training such impetus that it is universally used today both in our schools and for instructing our Armed Forces. Operadio looks back with pride to its pioneer work and engineering contributions in this field . . . looks forward eagerly to applying electronics to your product or process when today's urgent war work is done.

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displacing three shifts; men going where or into service are not rep-
More important, machine tool
tives are busy figuring on nonma-
tool war business. Washington is
courageing them, though they know
well that it is late to change over.

• **Changes Now Made**—Some are
ready engaged in such work, making
craft, engine, or propeller assembling
parts, steam and diesel engine
bomb parts, aircraft torpedoes, war-
ship steering gears, turbines, and
drives for tanks and artillery items.

The shift away from machine tool
however, is relatively slow. Some
of the industry's capacity is still devoted
to tools, only 9% to direct war work
(9% being idle). A survey by the
division of WPB shows that 228 com-
panies doing 88% of the August
machine tool business have on hand \$1,000,000 of direct war work, compared
with \$350,000,000 of machine tool
orders. Over 53% of the reporting com-
panies have no direct work at all.
• **WPB's Warning**—The smallest firms
have much more direct work than
medium and large companies. (This is
understandable because the smaller
company, the quicker it can turn around
and get a job it can handle.) WPB
warns, nevertheless, that the rate of
conversion must be accelerated if the
industry's full capacity is to be kept
busy next year.

The shrinkage in machine tool
business is already bringing action. In-
ventories are being cut by most builders
so that they will be of reasonable proportions
before the war ends. Builders
remember vividly that 25 years ago they
received staggering cancellations of
orders overnight when the armistice came.

• **Pool Almost Drained**—They don't
want to get caught again. That's what
they are pushing for, and hope to ob-
tain, some protection against cancella-
tions, perhaps in the form of pool
orders with limited quotas for individual
companies.

The big pool, which provided an umbrella
for the industry and enabled it to go
full speed ahead though specific orders
were lacking, is being liquidated. Of
\$1,860,000,000 of pool orders since
Feb. 1, 1941, all have been shipped or
assigned except \$83,000,000.

• **New Rule Hurts**—One WPB rule
imposed a few months ago, has made
it extremely difficult for war contractors
to order machine tools on their own for
such purposes as strengthening production
lines and increasing production. Such
orders (known as PD-1A's) are distinguished
from those that are the direct responsibility
of government agencies (PD-3A's).

They must be screened by passing
through regional WPB offices to see
whether existing machine tools are avail-
able to do the job. A large number of
orders have been disallowed, and the

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...pees into the wonder world of tomorrow



"My freezing plant is up there . . . 35,000 feet UP!"

...this picture and conversation
...oon after the war."

Here's a commercial grower of
...as or strawberries or what-have-
...ou, explaining how his produce
...ets to market. Picked at the time
...f perfect ripeness, it is packaged
...nd loaded immediately on a
...argo-carrying strato plane. Then
...takes off for the urban market.

Up, up, up it goes. Stratosphere
...r, with a temperature 'way below
...ero, circulates through the cargo
...gives the fruits or vegetables a
...quick freeze, refrigerates them
...perfectly all the way to the unload-
...ing point.

Interesting? Yes—but peace is go-
ing to bring plenty of other start-
ling innovations in distribution
and merchandising. Stores will be
full of new, improved products.
*And packages will be vastly im-
proved, too.* More efficient, more
appealing, more self-selling. Pre-
vention of spoilage and soilage
will also be a "must" for every
package.

We believe Cellophane will play
an important part in post-war
packaging. What we have learned
during eighteen years of peace-
time research, and what we are
learning now in solving many vital

wartime packaging problems, will
help to make that so.

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An interesting booklet containing other
advertisements in our Business Week
series "Glimpses Into The Wonder World
of Tomorrow" is yours for the asking.
Write E. I. du Pont de Nemours & Co.
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BACK THE ATTACK WITH WAR BONDS



Cellophane

BETTER THINGS FOR BETTER LIVING...THROUGH CHEMISTRY

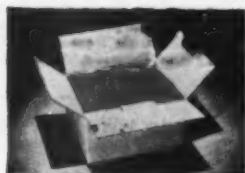


Why paperboard is scarce

It's in the "woods" where we find the significant reason for present paper-board shortages. Many lumber jacks have left their wood-cutting for the armed services and for jobs in defense plants. The manpower shortage and unfavorable weather conditions have also affected the supply of straw used in corrugating materials as well as the collection of waste paper, both so important to the industry. Add to these difficulties the tremendous increase of war-time packaging demands, and the reasons for present shortages are evident.

Any relief in sight? The War Production Board has placed restrictions on the manufacture of some types of paper, and paper products, but unless current demand trends are radically changed; unless raw materials and manpower are visibly increased, paper production for '44 will meet only the most essential needs.

The production of The Hinde & Dauch Paper Company, one of the Nation's largest manufacturers of corrugated shipping boxes, is devoted to war needs. As a leader in the industry, H & D is endeavoring to procure sufficient raw materials to continue the manufacture of corrugated boxes



for war materials, Lend-Lease supplies, and essential civilian needs.

Sidney J. Schuman
PRESIDENT

HINDE & DAUCH

AUTHORITY ON PACKAGING WAR MATERIALS

EXECUTIVE OFFICES, 4361 DECATUR STREET, SANDUSKY, OHIO

FACTORIES: Baltimore • Boston • Buffalo • Chicago • Cleveland • Detroit • Gloucester, N.J. • Hoboken, N.J. • Kansas City • Lenoir, N. C. • Montreal • Muncie, Ind. • Richmond, Va. • St. Louis • Sandusky • Toronto

screening time of ten days has stretched out into three or four weeks or longer.

• **Russian Needs Fall**—Included in 1944 estimate of machine tool requirements are the needs of Russia and Poland. The Soviet was expected to need some \$125,000,000 worth of machine tools next year, but in recent weeks interest has slackened because its primary aim was to get food.

Just now no one knows what volume of machine tools will be sent to Russia. For a while, the proposal was that a portion of the machine tools normally made in England be built here and sent to Britain, releasing some of its manpower for direct war work. Nothing has come of that plan.

• **Four Beats 40**—Like others, machine tool makers are thinking and talking postwar plans. They have produced more machines in four years than in the previous 40, and they see difficult times ahead unless the huge surplus of government-owned equipment is handled judiciously. They also see themselves without adequate reserves unless some modifications are made in the renegotiated law and in the tax laws to permit accumulation of postwar reserves.

They strongly feel that they should have a voice in the disposal of government-owned tools. There is no agreement among them as yet, however, on a specific plan.

• **Disposal Plan Sought**—Their ideas range all the way from trying to buy up all the munitions plants and the machines in them for possible future emergencies (thus removing the tools from the commercial market) to distributing them to schools and government agencies and through lend-lease to foreign countries.

Some believe the best thing is to freeze the machines where they are; others say the only solution is to get them out and into use immediately, scrapping the oldest.

• **A Bright Outlook**—Though the aftermath of 1917-18 has taught the industry that some companies are not likely to survive the rigorous competition after this war, tool builders are not resigned to looking at an entirely black future.

Many of them see good business ahead in retooling the automobile and other industries (especially those manufacturers who are prepared to furnish special single-purpose, high-production machines). They see a good export trade to countries in which industrialization is catching hold.

• **Optimistic Predictions**—Offsetting the pessimists are those builders who believe that only by the development of the most productive machines and cost-cutting methods in history can America provide jobs and production income on the broad scale that planners are proposing. The machine tool industry must necessarily be in the thick of such developments.

Testing Troubles

Two indictments plus two add up to plenty of worry Carnegie-Illinois Steel in specification plates case.

Twenty-eight thousand tons of sub-specification steel brought grief to Carnegie-Illinois Steel last week when the federal government filed a civil action for damages of purportedly false tests made of steel plate which was delivered to Army, Navy, and the Maritime Commission.

Employees Also Sued—In the U. S. District Court at Pittsburgh, the government sued Carnegie-Illinois, its sales agency (United States Steel Export Co.), nine Carnegie-Illinois employees, of whom were employed at the Irvin Works, where the alleged test specifications were made.

The suit asks \$2,000 for each act of alleged misrepresentation and double amount of any damages the government sustained.

Knowledge Charged—Although making no claim that the steel for plating hulls was not suitable for the purpose, the government maintains that the defendants knew the material was in accordance with rigid specifications

when claims for payment were entered.

The government's civil action was piled atop a citizen's "informer" suit for upwards of \$2,000,000 against Carnegie-Illinois (BW-Mar.27'43,p7) and three indictments accusing the corporation of concealing and destroying records concerning the steel.

• Tanker Involved—The story had its origin Jan. 16 when the tanker Schenectady broke up before it could be put to sea. Sen. Harry S. Truman's war program investigating committee opened hearings two months later after Henry J. Kaiser, West Coast shipbuilder, complained that faulty steel was responsible for the tanker's breakup.

It developed that steel for the tanker did not come from the Irvin Works, and the American Bureau of Shipping reported that faulty steel was only one of four factors in the tanker's crackup (BW-Mar.27'43,p30). But the Truman committee heard testimony to the effect that on a small percentage of plate production at Irvin, tests were "pulled up" to required specifications. This was contrary to usual procedures of listing the actual test result and reporting it to the customer to ascertain whether he would accept the steel.

• Big Steel Explains—Estimating that 28,000 tons of sub-specification steel (worth \$1,400,000) were shipped from Irvin, J. Lester Perry, president of Carnegie-Illinois, surmised that under war-

time pressure, a few employees may have grown lax in testing procedures and passed steel they knew would be entirely suitable for shipbuilding purposes although below specifications.

Benjamin F. Fairless, president of the parent U. S. Steel Corp., pointed out that specifications call for steel three to four times stronger than absolutely necessary. He quoted a Maritime Commission official as saying that the plates in question would have been accepted had the deviations been reported. In line with Fairless' promise that those responsible would "walk the plank," four officials were suspended.

• Production Slumps—The ink on newspapers carrying the committee testimony was hardly dry before a Chicago attorney, Herman M. Cogan, filed an "informer's" suit under a Civil War law which would permit him and the government to collect double the damages sustained by the government (BW-Mar.27'43,p7).

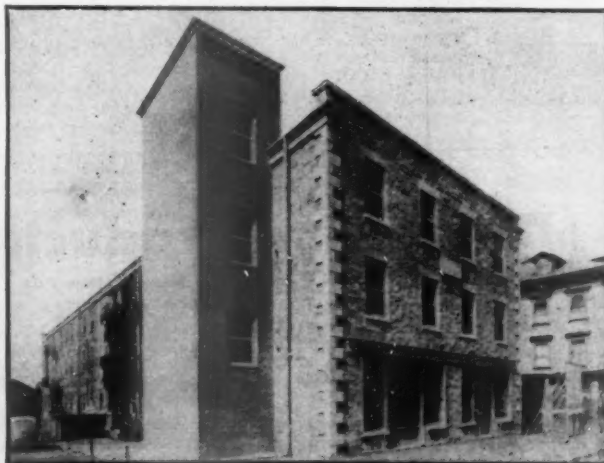
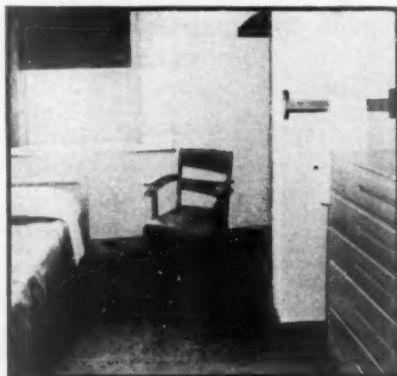
As a federal grand jury convened in Pittsburgh to investigate, a slump in steel plate output was reported, and WPB Chairman Donald Nelson called on government and industry to avoid imposition of an overzealous system of testing and inspection which might hamper war production.

• Three Bills Returned—After a six-week session, the grand jury indicted Carnegie-Illinois on a charge of concealing and destroying records of sev-

ASTY HOUSING

ing time, money, and materials in providing living space for workers in congested areas, the government is turning old buildings into modern dormitories. Behind the project is the Federal Public Housing Authority which figures savings of critical materials at 60% to 75%. Typical of its work is the conversion of a 100-year-old granite-walled structure (below)

that once housed a cutlery mill at Newport, R. I. By overhauling its facade, installing new floors and plumbing, the authority acquired a simple but comfortable dormitory (below right) in no time. Its 208 units are completely furnished for occupancy (right). Thus far the FPHA has acquired more than 25 nonresidential buildings—former office buildings, resort hotels, etc.—that ultimately will house 4,000 dormitory units.



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 Dis...

vitamin news

Myva-Dry Vitamin A Powder—new dry form of vitamin A concentrate—permits fortification of many foods, pharmaceuticals

● Distillation Products, Inc., the home of high vacuum molecular distillation, has produced another "first" in the vitamin field.

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eral hundred physical tests on... ordered by war agencies. A week... two more indictments followed... accused the corporation and... S. Dahl, general superintendent... vin, with conspiring to conceal... plate tests and named ten officers... employees "co-conspirators" but... defendants. The other charged the... poration alone with falsely represent... that specifications for government... were met.

Doctor's War Aid

Rare metal, tantalum, now used by surgeons in care of skull and nerve injuries, and in bone fractures.

Tantalum, a heavy gray metallic element, is for the duration confined to exacting tasks in the war effort. In recent months, as the result of several years of medical research sponsored by Fansteel Metallurgical Corp., largest maker of this rare metal, an increased quantity is being used surgically in repairing bone fracture and skull, nerve and tendon injuries of American soldiers and sailors on the fighting front.

● **Outstanding Example**—Star example of tantalum's usefulness in repairing skull injuries is a sailor who happened to be the first military patient patched up with this material. He was injured in submarine service and underwent operation by which a large head opening was covered with a tantalum plate.

Allowed to go home on 30-day furlough within a few days after the operation, the sailor returned in two weeks demanding active service. Scorning office job, he passed the stiff tests of submarine duty—and at last reports of handling his undersea task as well before he was injured.

● **Rapid Rehabilitation**—Many military cases have undergone major skull surgery with tantalum implants, some of these plates covering more area than the entire forehead. Most of these men were back on their feet a few days after the operation; some of them returned to active duty inside a few weeks.

A number of nontoxic materials have been used for patching and fastening in skull and other bone surgery, with varying degrees of success. What has made tantalum acceptable to surgeons is that, although it is biologically inert, it has one unique quality: Bone will grow to it and over it, and so will soft tissue.

● **Plates, Pegs, and Bolts**—Consequently, surgeons can do tricks with tantalum that were impossible with materials previously available. Some of these include tantalum plates pegged to bone fractures as reinforcements, and bolts

...ing together joints which had been separated by injuries.

In the repair of nerves, surgeons have been using tantalum wire in many cases to suture severed nerve-ends, wrapping the patched area with tantalum to prevent the nerve's growing into surrounding tissue. The most spectacular exhibits of this use are a number of cases who have regained use of their hands and feet after shrapnel and bomb wounds had severed major nerves, causing injuries which, by previous methods of suturing, would have been expected to leave serious impairments of function.

Aid in Plastic Surgery—Other surgical uses are cropping up. Noses and ears have been formed with the aid of tantalum, replacing parts lost in battle, and other types of plastic surgery have been performed.

Robert J. Aitchison, president of Fansteel, expects that the surgical uses of tantalum should provide an important postwar market. A Fansteel representative is currently visiting every major military hospital in this country, explaining to meetings of the surgical staff the uses and techniques involved in its application.

VACATION AT HOME

Winter vacations are going to be a little less possible this year than last. There will be no extra trains and no extra sleeping cars.

Last November the Office of Defense Transportation permitted one extra train a day from Chicago to Miami. Since spring it has been discontinued; and it won't be restored.

Southern resorts and Mexico are advertising on a small scale, hoping that people will be able to travel to them in spite of crowded trains and jammed airlines. Canadian railways will not have any ski trains and will probably refrain from talking up Canada's attractions until after the war.

The rumor that food rationing isn't as bad north of the border, however, probably will draw some vacationers, and the influx to Mexico is expected to grow.

Many of the hotels on Miami Beach which were taken over by the Army have been released (BW—Jul. 10'43, p. 28) and, if labor and materials can be found, will try to reopen before Christmas.

"SCRAP" TOOLS STUDIED

With the Truman committee nosing into the sale of surplus Army Air Forces cutting tools at scrap prices (BW—Oct. 2'43, p. 27), outlet dealers who bought them have voluntarily frozen their stocks pending reappraisal.

The bulk of the tools is still in Detroit in stores only a few miles from the warehouse from which many of them were sold at 40¢ a lb. They are



These are excerpts from a few of the many letters now on file in our office. They tell a worthwhile story.

HUGHES AIRCRAFT CO., Culver City, Cal.—"Our Davidson is being operated 24 hours daily and the work produced has been completely satisfactory. We are ordering a second Davidson."

MADISON VOCATIONAL & ADULT EDUCATION SCHOOL—"We can produce long runs considerably cheaper than by letterpress . . . have had no mechanical troubles whatsoever. Register is perfect . . . very little time necessary in learning to adjust and reset."

AMERICAN UNDERWRITERS' CORP., Olympia, Wash.—"We have more than saved the initial investment."

FIDELITY MUTUAL LIFE INS. CO., Philadelphia—"The machine has already enabled us to set up some long range economies in the processing of our many regular forms—with improved quality."

ALLIED OIL CO., Cleveland—"Our Davidson is doing a fine job . . . we are fully satisfied."

BAILY METER CO., Cleveland—"We have found our Davidson to be a good machine, doing everything it is supposed to do."

The Davidson, you know, is the duplicating machine that reproduces from direct or photographic offset plates, type, electrotypes, and rubber plates, providing five different methods of reproduction. And only a Davidson can give you *all* this in *one* machine.

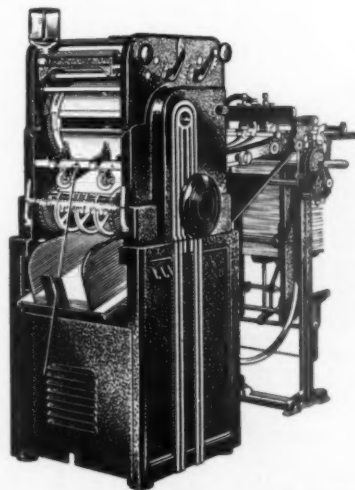
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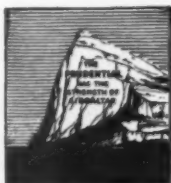
It tells and shows how the Davidson operates and includes samples of the work it produces. Ask for your copy today. There's no obligation.



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being appraised by a committee of government and industry men whose work is expected to be completed around the end of October.

Air Forces officials said the purchasers of the tools had agreed to permit the government to repossess them if they are found to be worth considerably more than the prices paid for them. Opinion of tool men in Detroit was that around half of the \$1,500,000 stock consisted of standard, catalog-item tools. This pointed to repossession of perhaps a third of the tools still in stock, since a number of independent purchases had been made at original prices paid by the government.

Yule Firs Scarce

Shortages of manpower and transport, in both U. S. and Canada, are reflected in reduced supply of Christmas trees.

Disappointment is in store for many a flush war worker whose dreams of a white Christmas are associated with visions of an old-fashioned Christmas tree. The supply of trees, diminished by manpower and transportation curbs in Canada and by much the same thing in the United States, just won't stretch.

• **Down to a Trickle**—Dominion authorities have applied the squeeze in several directions, with the prospect that

exports to the U. S.—as many as 5,000,000 trees in prewar years—will slough off to a trickle.

Growers in Canada are denied both labor and transport, and the railroads are forbidden to haul trees in cars suitable for grain and other essential commodities.

• **Shortage About 25%**—U. S. controls are less formal, dictated almost exclusively by the availability of manpower and transportation. Normally, about 10,000,000 balsam firs, Douglas firs, red firs, spruce, and pines are cut for the Christmas trade.

Estimates are that the supply this year will fall 25% short of that figure because men can't be spared from essential lumbering and pulpwood operations and railroad boxcars and gondolas have more important jobs ahead.

Shortages are expected to be particularly acute in crowded war production areas, where demand will be sharpened by fat pay envelopes, but supply will be curtailed by the prior claim of war materials on truck and rail facilities.

• **Where They Grow**—The great bulk of Canadian trees are grown in Nova Scotia, New Brunswick, and Quebec (largely balsam fir) in the East, and in British Columbia (Douglas fir) in the West. The Canadians also have made a hit with the Scotch pine, noted for the persistence of its needles.

In the U. S., the north central and northeastern regions account for the balsam fir and spruce, the Rocky Mountains and Pacific Northwest for the



CHICAGO'S TUBE

Chicagoans are giving their new subway an enthusiastic welcome after waiting almost 50 years for it (BW—Apr. 10 '43, p. 58). At a midnight opening of the State Street line this week, literally thousands jammed the sta-

tions to inspect the modernistic appointments. Thus far, five years and \$34,000,000 have been spent on about five miles of the State Street line, connecting with elevated lines to north and south sides, and on the Dearborn Street line which must remain only 80% complete until after the war.

But how does an engine breathe at 6 miles up?

When a big bomber goes "upstairs," the air gets thin. Rare. Murderously so. Bomber crews can breathe by using oxygen masks. But how about the engines?

American bombers help their engines breathe with superchargers that feed air under pressure into the carburetors.

Some superchargers spin their fans more than 21,000 times a minute. Heat to a red-hot 1200° F.! Any steel that can stand punishment like that has to be something very special!

Very special steels are the order of the day with United States Steel during these critical times. Armor-piercing shot; lightweight steel sheets and seamless tubing for aircraft; strong, pencil-thin barrage balloon cables; stainless steel wire finer than human hair—these are just a few of U.S. Steel's "very specials" for victory.

New steels for you when peace comes

One day (soon, we hope) the war will be won, and trade-marked U.S.S. Steels will be free again to serve in the manufacture of peacetime products. The U.S.S. Steel, placed on the goods you produce, will be your customers' assurance of quality steel.

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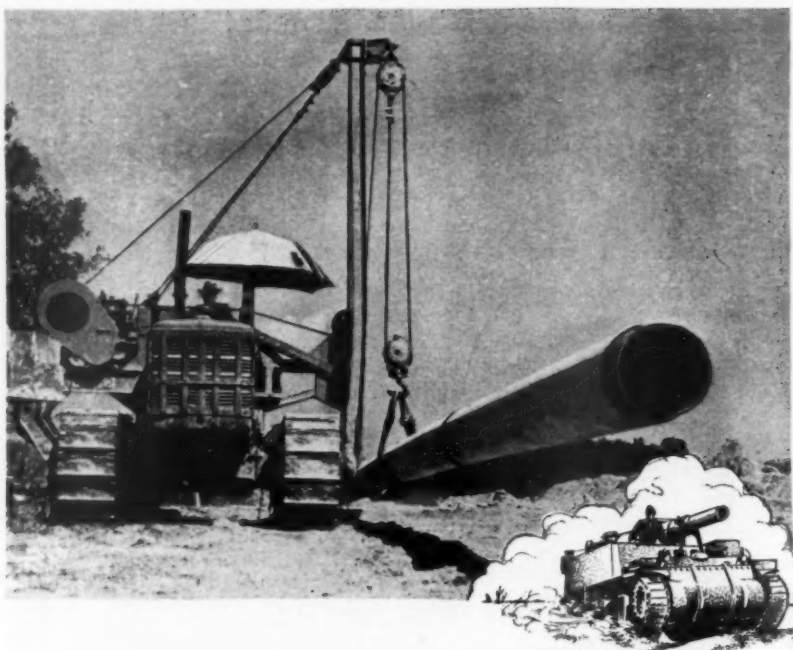
Every money you loan builds America's war strength. When again to spend in years to come... for new products, products of steel, things for better living.



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Words...or weapons?

Long on talk...short on action—that's how our enemies regarded American war production a while back. Now they know that our "big talk" about building pipe lines, rubber plants, ships, aircraft and weapons of all kinds has been matched by the actual performance. Yellow Strand *Preformed* Wire Rope has advanced this program at thousands of points. And you have aided directly by choosing long-lasting Yellow Strand...employing it efficiently...sharing your ropes with other essential users.

In contrast to resolute words which give no comfort to foes, there's talk of another sort that we can profitably curb. Casual "small

talk" about individuals in service...troop movements...new phases of production. Pieced together like parts of a puzzle, these fragments may reveal some big military secret to listening enemy agents. So our government says: "Don't repeat even *little* things about the war effort unless they've been published or broadcast. Think *before* you talk."

The safe course is to let your actions speak for you. Continue to work...to cooperate...to conserve vital materials, including the *Preformed* Yellow Strand that our fighting forces and war industries need in ever-growing amounts. There's no better way to help them silence the Axis for good.

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PREFORMED WIRE ROPE



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WE SERVE THE GOVERNMENT AS WE SERVE INDUSTRY: WITH DETERMINATION THAT OUR ENTIRE ENERGIES AND RESOURCES SHALL HELP TO WIN THE WAR

Douglas fir, California for the north and the South for the various species of pine.

• **Balsam Preferred**—Balsam fir is preferred because of its pleasant appearance, its well-formed branches, its ease of shipment, and because it does not lose its needles quickly.

• **Seedlings Maturing**—Millions of seedlings were planted in state and national forests in New York, Pennsylvania, New England during the depression forestation era, and many of these are approaching maturity.

The U. S. Forest Service encourages the planting of Christmas trees because they can be harvested at a profit in 15 years without interfering with conservation programs.

• **No Price Ceilings**—Nothing more than conscience and the law of supply and demand will control the prices of Christmas trees this year.

OPA decided against imposing a schedule of ceiling prices because Christmas trees are harvested under varying conditions and they are both seasonal and perishable.

In the past, prices have ranged from 75¢ for the table-size to \$5 for a 7-foot tree.

Synthetic trees have all but disappeared, due to scarcity of paper and

Maryland Quinine

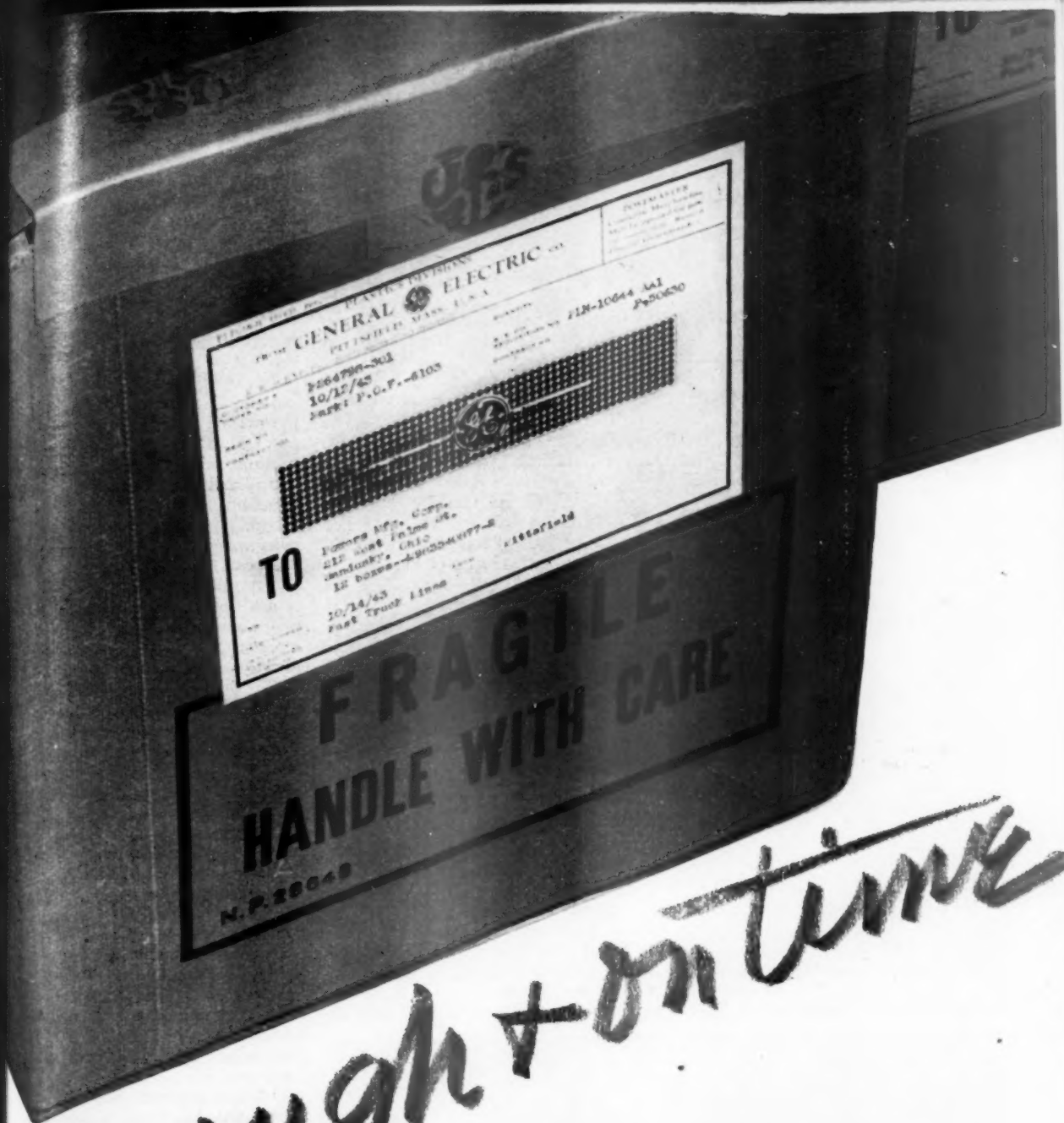
Seedlings, grown in U.S. from seeds saved in the fall of 1941 in the Philippines, will be given to Latin-American countries.

Thousands of flats of cinchona seedlings from six to fourteen inches tall are ready for air shipment to Latin America to grow trees from which quinine can be extracted. They have been grown from some of the 2,000,000 seeds brought out of the Philippines by Col. Arthur F. Fischer as the Japs came in. Ben Morrison has been growing them under glass in the Dept. of Agriculture experiment station at Glendale, Md.

• **Promising Future**—Since arrival in May, 1942, half the seeds have been planted in batches six months apart. They probably won't produce quinine for eight years although, in emergency, they could be cut in two years. Because these seeds were high class and will produce a prize little forest, they're being husbanded to bring back to America a tropical industry that was transplanted, like rubber, to the Netherlands East Indies.

Morrison is an old hand with cinchona plants. He has nursed cinchona seedlings for some 15 years. He has watched the unsuccessful experiments in the Virgin Islands and Puerto Rico. (Panama Rico's trees may prove to be good)

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Employees of the General Electric Company are on their jobs producing more goods and buying over a million dollars of War Bonds every week to hasten victory."

bearers. The Puerto Rico project was sponsored by Mrs. Roosevelt and Gov. Rexford Guy Tugwell.)

• **Countries Involved**—Morrison leaves this month for a tour of projects in Guatemala, Costa Rica, Peru, and perhaps Brazil, Latin-American countries that are receiving his gift of seedlings. And if his trees turn out as well as present indications promise, the Dutch East Indies' world quinine monopoly will be broken.

Cinchona is hard to grow. It needs water and drainage at the same time, altitudes between 3,000 and 7,000 feet, sun but not too much, no frost, and soil that allows deep root growth.

The tree has to be completely destroyed for medical use. Its alkaloids are extracted from twigs, bark, and root—so a continuous supply of new plants is essential.

• **Unpredictable Market**—Latin-American countries have been cooperative in bringing quinine back to America, but hesitant about investing much money because they aren't sure that there'll be a market eight years from now when the trees mature. Brazil is leading in the technical assistance, but Merck's growers in Guatemala have a lot of know-how, too.

Substitutes for quinine, like atabrine, have peculiarities that leave quinine still desirable so far. Some persons are allergic to atabrine; some can't ever eliminate it. And quinine apparently attacks the malaria microbe at a different stage of its growth from the synthetics.

• **Wild Trees Utilized**—The U. S. is getting quinine from so-called wild trees in South America and has agreed to replace the trees our medical needs destroy with seedlings. Peru will probably get this season's shipment.

Ore Goal Sighted

With 65,102,295 tons of iron ore already shipped, mines can meet quota if the weather holds out until December.

Despite almost a month's delay in the opening of navigation last spring and intermittent fogs and ship accidents that later impeded traffic, the Great Lakes iron ore fleet is well on its way toward its 1943 quota of 86,500,000 tons. The preseason goal was 95,000,000 tons, about three million more than the record-breaking movement of iron ore last year (BW—Dec. 19'42, p17), but the Office of Defense Transportation revised the quota after WPB indicated it would be satisfied with the lesser tonnage.

• **Hampered by Fog**—The 1943 ore shipments from the upper Lakes totaled 65,102,295 tons to Oct. 1, as compared with 72,441,453 tons on the same date last year. Shipping was hindered by foggy weather in September, but loadings totaled 12,677,985 tons, which was 897,540 tons less than the same month in 1942 and a little short of the 13,000,000 tons scheduled to be moved in September.

The schedule now calls for delivery of 12,000,000 tons in October and 9,500,000 tons in November, which would achieve the 86,500,000-ton quota. But it will be nip and tuck if the weather doesn't improve. However, there is the possibility of adding about 750,000 tons in the few remaining days of shipping before the winter tie-up in December.

• **Icebreaker Ready**—The U.S.S. Chaparrall, old car ferry converted into an

icebreaker for the Coast Guard, moved from Duluth drydock recently to Sault Ste. Marie to be ready to keep the shipping lanes open for traffic in that bottleneck area in late November and December. While the biggest icebreaking job is in the spring, there is in addition always the possibility of an early freeze-up at the end of the season such as that which occurred in November 1926, when 247 carriers were held fast in the ice for ten days in the vicinity of the Soo.

In peacetime, Nov. 30 was considered the end of the ore shipping season, for the normal insurance rates remained in effect until midnight that date. But in wartime, high shipping risks must be taken, and traffic continues until the freeze-up.

• **Four Carried Grain**—During midsummer, only four of the 318 ore carriers had been diverted to carrying grain, but after mid-November, when iron ore becomes frozen and requires steaming to pour down dock chutes into boat holds, more of the vessels go into the grain trade. The ore fleet was augmented this season by 14 ships of 18,000 tons capacity built by the U. S. Maritime Commission and put into service as they were launched—three as late as last month. Two more are nearing completion. Stocks of iron ore at lower Lake ports and furnaces are about 4,000,000 tons below a year ago, but if the 86,500,000-ton quota is reached, stocks on hand next May 1, when navigation will have been resumed, will constitute a safe margin of 40 to 50 days' supply, operators explain.

In addition to the ore carriers, more than 200 other vessels ply the Great Lakes, hauling grain, limestone, petroleum, coal, and other bulk freight. Ore carriers haul the bulk of the coal on their return trips to the upper Lakes, however.

• **Elevators Jammed**—Bulk freight commerce on the Great Lakes in 1942 totaled 178,577,828 tons. Of this amount, 1942 grain shipments from U. S. and Canadian ports totaled about 9,000,000 tons. Grain shipping this summer increased over last, although some ports, such as Superior, Wis., have not been able to ship out grain as rapidly and consequently must contend with serious congestion in elevators, still bulging with last year's holdover. Some grain is moving out by rail to points as far south as Texas.

The pace of grain shipments will be accelerated in November and December as iron ore movement tapers off. Despite the fact that many boats are now carrying ore which would normally be carrying grain, ore shippers still aren't satisfied. They say that grain movement thus far has cut iron ore deliveries by about 1,500,000 tons.

• **Sent Back Empty**—The season total of coal loaded into boats at Lake Erie ports



Tended with infinite patience, thousands of flats of delicate cinchona seedlings await air shipment from the U. S. Agriculture station at Glendale, Md., to Latin America—another step

in breaking the Far East's quinine monopoly. Grown from seeds flown out of the Philippines a jump ahead of the Japanese, the seedlings will mature in about eight years.

Sept. 26 was 32,975,210 tons, against 188,842 a year ago because ODT has at some ore boats back up the Lakes to supply rather than have them lose time loading coal. Nevertheless, Lake Superior ports are counting on getting a million more tons than they had last year before the season ends.

Too Few Barrels

Even though production should exceed 1941 rate, there won't be enough to meet demand for shipping kegs.

Barrels and kegs won't roll out of factories fast enough in the fourth quarter of this year to fill all demands, primarily because of labor shortages in the southern woods. WPB and the cooperage industry advisory committee frankly don't know what the demand will be, but after looking the situation over from the production end, they feel there are that 18,750,000 units can be turned out—3,750,000 from the tight cooperage plants and 15,000,000 from slack makers. At that rate, the industry next year could beat, by 2,000,000 units, the 73,000,000 barrels and kegs of all kinds made in the "normal" year of 1941.

Hope for Deferrals—Better saws for woodsmen and labor-saving machinery for finishing staves and heads are easing the situation somewhat, and if Selective Service will defer forest workers, manufacturers of containers will be happy. They aren't so eager to get permission to raise wage scales because high pay encourages absenteeism among too many Negro woodsmen.

Only lard barrels and those for fountain syrups, vinegar, and shortening used to make more than one trip. Other tight barrels which used to make only one trip now make five and slack barrels make three. This leads to some astronomical figures. There are 30,000,000 slack barrels and 30,000,000 slack kegs in use; each is capable of supporting about 150 lb. Multiply by three and you can theoretically transport 27,000,000,000 lb. a year. There are in use 8,000,000 tight barrels and 7,000,000 kegs capable of bearing 300 lb. each; multiply by five and you can ship 22,500,000,000 lb.

•Empties Are Useful—Whisky barrels are no longer being made, and distillers' stocks have aided the transportation of war material because, once such a barrel has been used to age whisky, it is not customarily used again. Hence it becomes a vinegar container or something else. Beer barrels are scarce; metal being forbidden, they are now made of laminated veneer.

War shipments in barrels include



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foodstuffs, chemicals, ammunition cups, chains, Thanksgiving turkeys for overseas, and much other meat. Dry skim milk will take 597,000 barrels in the fourth quarter, sugar 350,000, dried eggs 250,000, and fish 113,000.

• **Fisheries Demand More**—Barrels may be used for chemicals only if those chemicals can be packed no other way. WPB is a little worried about growing demands from the fish industry for more barrels. It is directing meat packers to go after secondhand barrels. It looks with a jaundiced eye on the barrels shuttling between Cuba and Florida carrying gin (BW—Aug. 14 '43, p20).

Hemp Slows Up

WPB is cool to domestic product now that imports have improved, but CCC and DPC have \$25,000,000 at stake.

A \$25,000,000 hemp headache is beginning to beat upon the financial temples of the Commodity Credit Corp. and the Defense Plant Corp.

• **The Chill**—It comes from the cooling of the War Production Board's ardor for domestic hemp, as imports of hemp and sisal from Central and South America increase, as prospects for importations of Italian hemp rise, and as jute from India goes increasingly into cordage.

Hot for hemp a year ago, WPB promoted a big expansion program. CCC

guaranteed domestic producers \$30 to \$50 a ton for hemp straw. DPC financed the erection of 42 hemp mills at \$360,000 a mill. Financing of harvesting and milling equipment runs the total beyond \$25,000,000.

• **Seed Failure**—Both corporations, however, would have more at stake were it not for a partial failure of the 1942 crop of hempseed in Kentucky. This was wanted for planting to straw this year of 300,000 acres, mostly in the Corn Belt, to yield enough fiber to keep 71 mills busy. Due to the Kentucky seed failure, only 175,000 acres were planted to straw.

The project has been ill-starred.

First, the Kentucky seed growers complained that CCC's buying price for 1942 seed (\$8 a ton) was too low, and its selling price (\$11 a ton for the same seed cleaned) too high.

Kentucky straw growers complained that they were stuck without buyers for straw the government had induced them to grow last year.

• **Price Increased**—CCC upped the buying price for 1943 seed to \$10 a ton and agreed to buy the 1942 straw.

These difficulties resolved, the Agricultural Adjustment Administration rushed out its men to sign up Corn Belt acreage for 1943.

Twenty thousand farmers signed, but later their dreams of \$200-an-acre hemp (four tons to the acre at \$50 a ton) faded when storms flattened part of the crop.

• **All Wanted Mills**—Meanwhile, every Corn Belt community was urging its se-

lection as a mill site, and the DPC ran into more trouble when bids got scrambled over misunderstanding of structural details.

Two mills have been built to date; the others are scheduled for completion by December.

• **Surpluses Ahead?**—Latest blow to WPB's coolness. Besides 300,000 tons of high-priced Corn Belt straw, now in production, the CCC may have 500,000 bu. of new seed this year.

Forage Goals Rise

Shortage of livestock feed leads to government drive for improvement in hay and pasture crops; seed ceilings set.

Wartime shortages of livestock feeds have put new emphasis behind government soil conservation drives for improved pasture and forage crops, especially in the South. Pasture improvement is especially promising under current circumstances because green forage can replace many of the high-protein supplement feeds which are in particularly tight supply (BW—Oct. 2 '43, p14).

• **Top Prices Set**—Ceilings on the most important forage crop seeds were set recently by OPA to check prices that have been soaring as a result of smaller crops, reduced holdovers, and increased demand, including lend-lease purchases for current shipment and for postwar rehabilitation stockpiles. Northern alfalfa, red clover, sweet clover, and timothy seed are covered by the order.

General price levels of last spring are the goals. Typical: \$35 a cwt. for Northern alfalfa, which sold for \$18 two years ago. Bluegrass and other seeds used in turf mixtures are omitted because OPA wanted to keep off the lawns.

Scarce though fertilizer is, the Food Production Administration has recently done a lot of figuring which will probably lead to even more intensive attempts to increase forage and other food crop yields by more liberal use of nitrogen, phosphoric acid, and potash. • **Phosphoric Potentials**—For instance, forage crops could normally be expected to use minimum needs of 275,000 tons of phosphoric acid, with expectable average yields of 30 tons of forage per ton of this fertilizing element or a total of 8,250,000 tons of forage. But more liberal addition of phosphoric acid could be expected to boost total production by another 12,400,000 tons, an increase of 150% over normal.

Such an increase in pasture and hay would be of major importance in meeting feed deficiencies for next year's livestock program. Comparable increases in the crop could be obtained by similarly



GLOBAL FARMERS

Composing the latest of a series of delegations that have been trekking to England as observers since the war began, three farmers study their route on a globe at Washington. They will represent lend-lease in surveys of

farming methods that have made the United Kingdom 66% self-sufficient agriculturally—compared with the pre-war ratio of 33%. Making the tour at Britain's behest are (left to right): Oscar Heline, Marcus, Iowa; Earl Robinson, Mondovi, Wis.; and Robert J. Howard, Sherburne, N. Y.

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Courtesy Norris Stamping and Manufacturing Co., Los Angeles, Calif.

SOFTENING A HARD PRODUCTION PROBLEM

SEVERAL of the toughest problems in converting cartridge cases from brass to steel have been solved by TOCCO. For example:

Forming the mouth of 3" case by cold-drawing causes work-hardening. This area should be ductile, to permit crimping to the projectile and to assure a gas-tight seal in the gun on firing. On the other hand, the side wall up to the mouth should be hard and "springy" to withstand the high firing pressures and still

permit easy extraction of the case after firing. The hard-to-soft transition zone should be accurate.

The answer was found by annealing the cartridge case mouth. TOCCO Induction Heating applies a uniform amount of heat for an exact length of time to a definite, prescribed area of the case . . . softens the mouth without affecting the side wall . . . assures accurate results on every single piece at a high production rate.

Material treated is SAE 1030 spherodized steel. Heated to 1300° F. Heating time per shell 4 seconds. Hardness before, 98 R.B.; after, 70 R.B. Output per machine (2 stations), 1000 cases per hour. TOCCO machine is clean and compact; doesn't require skilled labor.

Find out how TOCCO can help solve *your* annealing problems . . . your hardening, brazing and heating problems, too . . . present and post-war.

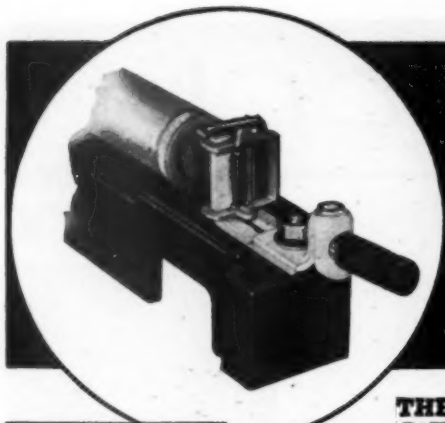
THE OHIO CRANKSHAFT COMPANY, Cleveland, Ohio



TOCCO

**HARDENING..BRAZING
ANNEALING..HEATING**





A Tightly Held Fuse Means A MORE PERFECT CONNECTION

THE INGENUOUSLY DESIGNED
KAMKLAMP FUSEHOLDERS

ON **EA** SHUTLBRAK Switches

clamp the fuses tight. Insert the fuse—turn the lever—and you have a copper-to-copper connection under strong and continuous pressure.

Convenient, too, are the **EA** Pressure Type (Solderless) Connectors, which make possible quick, sure connections with both line and load wires or cables—connections which will not "ease up" or become loose.

Because of these and other outstanding advantages, plants producing war materials have purchased thousands of these switches. Some are used singly—others are banked in groups—

or assembled in well-designed switchboards or panelboards. Still others are installed as plug-in units for **EA** Busduct.

Capacities: 30 to 1200 amperes, inclusive, for 250 volts AC or DC, and 575 volts AC, in 2, 3 and 4 pole types. Approved by Underwriters' Laboratories, Inc.

For Detailed Information, write for Bulletin No. 70 . . . Frank Adam Electric Company, Box 357, St. Louis, Missouri.

100 Amp. 575 Volt
EA Shutlbrak Switch
Cat. No. SA-10633



IN PT BOATS, TOO,
plywood is an essential structural material!

• You have read countless news stories and articles about the speed, stamina and striking power of the Navy's torpedo boats. What you may not know is that 3000 square feet of Exterior-type Douglas Fir Plywood go into the construction of each of these famous boats. It's used for decks, dockhouse, bulkheads, fore-and-aft strength members and interior trim . . . jobs for which this Miracle Wood's many advantages make it particularly suited. And it is hundreds of war services like this that are causing architects, engineers, designers and builders to reach one conclusion: Versatile Douglas Fir Plywood will be one of their most used postwar construction materials.

• SEND FOR FREE WAR USE FOLDER.
Douglas Fir Plywood Association, Tacoma, Wash.

**DOUGLAS FIR
PLYWOOD**
Real Lumber
**MADE LARGER, LIGHTER
SPLIT-PROOF
STRONGER**

STRONGER PER POUND THAN STEEL

productive additions of nitrogen and potash, FPA estimates.

• **How Much Will There Be?**—The question now agitating the experts is: How much extra fertilizer could be worked out of WPB for such a program as boosting pasture and hay production? Fertilizer tonnages involved in the FPA figuring exceed 3,000,000 for all tame hay as compared with 395,000 for corn the next largest unit involved.

WAYBILLS MADE EASY

Railroads are promoting a new set of bill-of-lading blanks that save time and mistakes by having the shipper make out the train conductor's waybill as a carbon copy of the original shipping order.

Ordinarily, railroad freight clerks fill out the trainman's copy, transcribing the description and other pertinent shipping data from the consignor order.

As revised by the Assn. of American Railroads in July, the new blanks eliminate extra clerical work and preclude copyist errors.

The shipper-made waybill, already in use, is similar to the old standard form. A major difference, however, is that all basic data needed by train crews are listed on the left side of the page in deference to conductors' traditional habit of folding them left side up.

The new A.A.R. "B/L" sheaf contains four copies: the original (for the consignee), the waybill, a shipping order, and a consignor's memo. For government shipments, requiring copies in triplicate (or more), extra carbons can easily be added.

MAILING LABEL SAVES PAPER

Always beating their brains for new paper-and-ink tricks, direct mail specialists are tackling the necessity for paper conservation with their customary veneer. In their diligent efforts to transmute an inert mailing list into pulsatory flesh-and-blood individuals who will respond to their hypnotic powers, the business reply envelope is an indispensable device. Rumors from time to time that its use might be banned have spurred the ingenuity of direct mail experts.

One result has been the increased use of business reply labels which prospects may stick on any envelope. These labels usually have a gummed back, and a further refinement now is making its appearance. Instead of a perforated instruction tab which must be torn off before use, Troy M. Rodlum of Washington, D. C., simply has printed on the face of the label itself, "Attach label to any envelope and mail to."

This cuts label cost and makes feasible the printing of these labels in rolls if the customer wishes. It also retains the design which postal workers are accustomed to working with

TIME...

a modern manufactured product

There is nothing we can do which will increase the number of seconds in an hour—or the number of hours in a day—but we *can* make each second and each hour more productive.

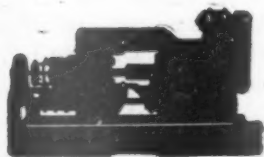
In that sense, Acme-Gridley Automatics actually manufacture *time*—by producing more.

In war production, time saved is important because it means quicker delivery of the tools and equipment that win battles.

In postwar production, time saved will be equally important, through its effect on the *cost* of finished goods.

It is also important to remember that production with Acme-Gridleys may be speeded up to the limit of what tools will stand without any sacrifice of precision or uniform high quality.

Better goods to sell—at lower prices—will be a sound basis on which to enter postwar markets, at home and abroad—a basis that Acme-Gridleys will help to establish.



ACME-GRIDLEY AUTOMATICS
maintain accuracy at the
highest spindle speeds
and fastest feeds modern
cutting tools can withstand.

The NATIONAL ACME *Company*
CLEVELAND • OHIO

THE WAR—AND BUSINESS ABROAD

Behind the Kremlin Front

First objective of the historic Moscow conference will be three-way determination of the future of Europe. Russian stand on exile governments raises problems. Soviets join lend-lease.

Behind the crenelated walls of the Kremlin, the staghands are busily rigging the sets for the most momentous conference of this war.

Those who work are no mean craftsmen: Britain's Anthony Eden, America's statesman Cordell Hull, Soviet Russia's Viacheslav Mikhailovitch Molotov. Offstage, with briefcases and memoranda, stands a host of prompters: top military, economic, political, and protocol specialists ready with the tools of their craft—facts, theses, and opinions.

• **Later, the Principals**—Onto this stage in time will come Roosevelt, Churchill, and Stalin—the leaders of the world's three greatest powers—to concur or to compromise on the final military stratagems of victory, the preliminary steps toward peace and security, but most important, the principles which are to be the common denominators of future United Nations actions.

Unless the Anglo-American diplomats have laid a second front on the conference table, the discussions will be conducted in an atmosphere of grim accusation. At sunset the batteries of victory cannon will rattle the windows of the Kremlin, and gay rockets piercing the night will penetrate to the dimmed conference rooms. The Red Army, marching relentlessly and at great cost toward the west, will be an ever-present factor in the decisions.

• **Times Have Changed**—Twenty-eight months ago, the alliance of Britain and the United States with Soviet Russia was a freely acknowledged marriage of convenience, a quick gesture of support—in the words of Prime Minister Winston Churchill—for any man or state that stood between Hitler and the gates of India and China.

Today Russia dominates her allies on the field of battle, carrying the war to the west with armies and equipment superior in number and quality to those that met the aggressor in 1941.

Even in the political sphere, the performance of the Red Army has sapped the prestige of the Anglo-American bloc.

And what credit Britain and the United States can take for their contributions of material aid is measured lightly by a nation which admits the loss of some 6,000,000 of its youth, billions of dollars of property, and many years of marching toward the fulfill-

ment of its ambitious industrialization program.

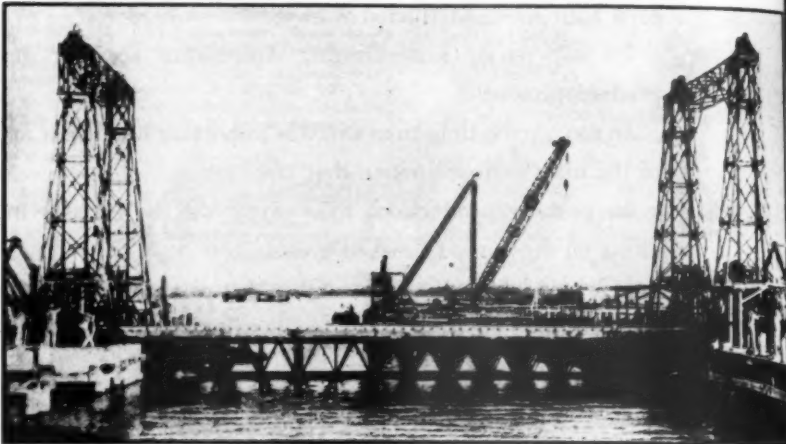
• **Broader Lend-Lease**—Thus, the importance of timing this week's announcement of a U. S.-British-Canadian lend-lease agreement with the Soviet Union to coincide with the commencement of discussions in Moscow cannot be measured in Anglo-American terms.

However, there is much that is significant in this agreement, notably the

formal acknowledgment of Canada's assumption of rank with Britain and the U. S. as a producer of arms and food in excess of the needs of her military forces overseas. In addition, and perhaps more importantly, the agreement is marked by Russian commitments to provide reciprocal aid to all three consignatories.

• **The Problem of Europe**—Uppermost among the objectives sought by the Anglo-American participants at the conference is agreement upon the necessity of a joint, three-way determination of the future of continental Europe.

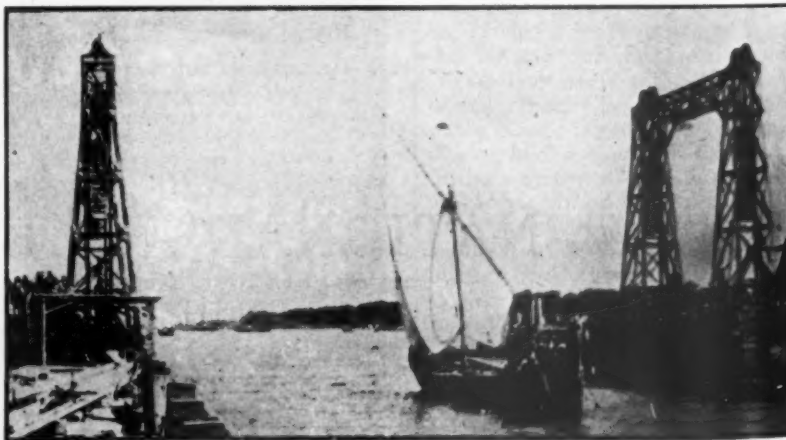
Europe is a Russian problem, as the war amply demonstrates, but with primary emphasis upon the Baltic and Balkan states, and Poland. Europe is historically a British problem by virtue of the fact that literally nothing can happen on the Continent that lies outside the sphere of British capital or balance-of-power alliances. And in a shrinking, interdependent world, Europe has become an American problem—addition-



SUBMERGING SPAN

At a Shatt-al-Arab River crossing in Iraq, one of the strangest concepts of a drawbridge carries road and rail traffic when it's up and permits ships to pass when it's down. This reversal of usual movable-bridge activity is ac-

complished by a 35-ton span across a 92-ft. channel. In up position (above), it rests on beams which are slid aside manually to allow it to drop 20 ft. under water for boat passage (below). Native muscles on four-hand winches raise and lower the span built by British Army engineers.



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Just for a moment . . .

While you are standing there, listening to the roar of your plant's war production, and looking ahead . . .

May we stand beside you? May our management look ahead with yours?

Out there is America. Its forests and farms. Its highways and waterways. Its cities of soaring buildings, and those that are yet to be built. Out there is your plant's future, your men's jobs.

If it is your plant's destiny to help harvest the forests or farms, to help travel the highways or waterways, to help build the buildings, then *better power* for all of those jobs cannot fail to interest you.

Better power is our future. Rugged, safe, low-cost Diesel Power. Proved in peacetime, and now proved again in war—in diesel generating units for the Signal Corps and Engineers, auxiliary units for the Navy, in fighting power for our armed forces everywhere in the world.

As your needs for such power become clearer, let us tell you how we can help. 5 horsepower to 2000. Rogers Diesel and Aircraft Corporation, 1120 Leggett Avenue, New York 59, N.Y. Divisions: Hill Diesel Engine Company, Edwards Company, Edwards Aircraft Products, Inc., Ideal Power Lawn Mower Company.

ROGERS



TRADE MARK REG.

DIESEL AND AIRCRAFT CORPORATION

Diesel Engines, 5 to 2000 h.p. » Gasoline Engines » Generator Sets » Generators » Power Units » Switchboards » Pumping Units » Hydraulic Aircraft Equipment » Recoil Mechanisms » Power Mowers » Power Brushes » Snow Removal Equipment » Streamlined deluxe Railway Motor Trains » Diesel Locomotives

New Floors Overnight

COVER OLD FLOORS

WITH *Carey Elastite* INDUSTRIAL FLOORING



QUICKLY applied over any firm sub-base of concrete, wood or steel, (without interruption to plant operations) this heavy duty flooring is ready for use immediately.

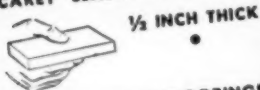
Speeds Work—Holds Up Under Heavy Loads

Carey Elastite Industrial Flooring is smooth and resilient, permitting loads to be moved easily and with less man-power. Non-skid, it reduces accidents and breakage.

Comfortable underfoot, practically noiseless—resistant to fire and dampness.

Don't take costly chances . . . solve your flooring problems with Carey Elastite. Write Dept. 29.

CAREY ELASTITE FLOORING



OTHER ASPHALT FLOORINGS

$\frac{1}{8}$ ", $\frac{3}{16}$ " and $\frac{1}{4}$ "



Do not confuse Carey Elastite Flooring with the thinner, decorative types of asphalt tile. This Carey Product is $\frac{1}{2}$ inch thick and provides a tough, hard-wearing surface that will take a heavy traffic beating, year after year.

Sizes: $\frac{1}{2}$ "x12"x24" and $\frac{1}{2}$ "x12"x12"
Colors: Black and Mahogany Red

THE PHILIP CAREY MFG. COMPANY

Dependable Products Since 1873 • Lockland, Cincinnati, Ohio

ally so by virtue of our newly assumed responsibility for leading the way toward permanent peace, security, and democracy.

• **Ruled Out, Left In**—Russia has ruled out of conference bounds any discussion of the future of her border acquisitions in Latvia, Estonia, Lithuania, and Bessarabia. As a result of preliminary agreements concerning the invalidity of the war-made German-Russian frontier, the subject of Poland remains open—for discussion between Russia and Poland. Poland is a special, and difficult, problem.

In view of these exclusions, the subject of specific discussion is restricted to joint determinations of policy vis-à-vis the Balkans, Italy, France, Czechoslovakia, and Germany, and to general discussion of the broader relationships between all nations on such subjects as armament, finance, raw material changes, and international law.

• **Political Clash-Points**—Russia has already been invited and has entered into the political sphere-of-influence initially conserved by the Anglo-American bloc. It joined in concurrent recognition of the French Committee of National Liberation and of the post-surrender Badoglio government in Italy.

To the Mediterranean Politico-Military Commission, which will conduct all preliminary negotiations in its arena, Russia has dispatched a delegation of some thirty experts headed by Vice-Commissar of Foreign Affairs Andrei Vishinsky. To Cairo, where the Yugoslav and Greek exile governments headquarter, Russia has sent Alexander Bogomolov, former Soviet ambassador to the exile governments in London, with a staff of twenty.

• **Which Governments?**—It is in these political spheres that the Moscow discussions may meet a first test. For one thing, Russia is frankly opposed to the reinstatement of prewar governments in countries which, under the duress of war, have created emergency local governments of a more liberal nature than their predecessors.

In the guerrilla areas of Yugoslavia and Greece, this is specifically the case. And Russia may take a line of its own on the political future of dissident groups in Italy and France—perhaps in Poland, the Low Countries, and Czechoslovakia.

On the other hand, Britain and the United States, by the evidence of their support and recognition of these governments, have committed themselves at least temporarily to the restitution of authority to elected leaders. On these differences there can be much dispute.

Least important product of the Moscow conference will be the proposals submitted to Washington and London for approval of the commanders-in-chief. More important will be the final meeting of these leaders, and the implementation of the decisions to which they commit their countries.

Oil From Arabia?

Visit by Near East royalty
sets off widespread rumors of
historic petroleum deal; mission
to Mecca already planned.

Rumors flew like pigeons from Washington's grimy old building which houses the State Dept. and the spick-and-span Interior Bldg., where the Petroleum Reserves Corp. resides, following the visit of princes from Saudi Arabia (BW-Oct.9'43,p48). Some of the pigeons alighted far out in the country.

Oil Towns Buzzing—A Dallas newspaper reported that PRC was getting ready to drill 20 wildcat wells in Iraq and Iran. A Tulsa newspaper said that the State Dept., which recently gained new authority to set foreign economic policies, had borrowed Col. John H. Seavell from the Army and appointed him petroleum attaché, a new position, in the Near East.

Other and varied reports were plentiful. Chiefly, they centered upon the Middle and Near East oil fields and the part which the United States may be planning to assume in development and perhaps in ownership. California Arabian Standard Oil Co., jointly and equally owned by Standard Oil of California and Texas Corp., has the concession on all of Saudi Arabia—350,000 sq. mi., equal to Texas, Oklahoma, and a little more.

Spadework Begun—Petroleum resources of Saudi Arabia were recently classified as "very great" by James Terry Duce, then director of the foreign divi-

sion of Petroleum Administration for War. Duce last week returned to his old position of chief foreign geologist for Texas Corp. He also is a vice-president of California Arabian.

Evidence that the company is well on its way toward exploiting its Saudi Arabia concession was clear nearly two months ago when it launched a big recruiting drive in San Francisco papers for engineers, foremen, oil well rig builders, accountants, mechanics, welders, boilermakers, machinists, and storekeepers (BW-Aug.28'43,p76).

• **Capital Needed**—The company needs much money, it is said, to build a refinery and do the field development necessary to provide war supplies. One report is that the company turned to Washington for money, and that the government decided it wanted a piece of the company. This would make the U. S. an oil business owner on foreign soil for the first time in history. California Arabian is said to be balking at such a partnership.

Confirmation of this report is yet to be heard. PRC announced that its mission to Mecca would soon be on its way. Harold Ickes, president of PRC, chatted about it in a one-page press release, saying it was all tied in with military strategy. Principal specific news was that E. DeGolyer, consultant to PRC, and William Embry Wrather, director of the U. S. Geological Survey, would be in the party and that other names would be announced later.

• **The Lineup**—PRC was chartered by the Reconstruction Finance Corp. June 30 and, as part of President Roosevelt's settlement of the Wallace-Jones fuss, was transferred to the Board of Economic Warfare, thence (by changes in

BY ADAPTING CUSTOMER'S EQUIPMENT already on the premises—thus cutting waste motion and expense—the 46-94' trusses on this storage shed for Shevlin-Hixon Lumber Co., Bend, Oregon, were economically erected in a few days. Building designed and supervised by Gerry Horskotte, Shevlin-Hixon Engineer.

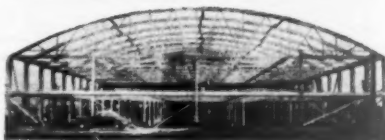


TIME IS IMPORTANT- USE TIMBER STRUCTURES

Buildings are erected quickly when you specify roof trusses by Timber Structures. And coupled with construction speed are the advantages of economy, strength, permanence.

This organization specializes on design, fabrication, assembly and erection of trusses and other timber items. All types of industrial construction are served—from small business buildings, bridges and factories to huge army depots, aviation housing.

We welcome the opportunity of submitting suggestions on trusses of timber or other structural materials in your projects. Illustrated book of Timber Structures jobs in various industries sent upon request. If west of the Mississippi, send to Portland 8, Oregon. If east of the Mississippi, send to 535 Fifth Ave., New York 17, N.Y.



ERECTED IN FOUR 8-HOUR SHIFTS. Mold loft for Henry J. Kaiser's famed Oregon Shipbuilding Corporation, Portland, Oregon. Architect: Wolff & Phillips, Portland.

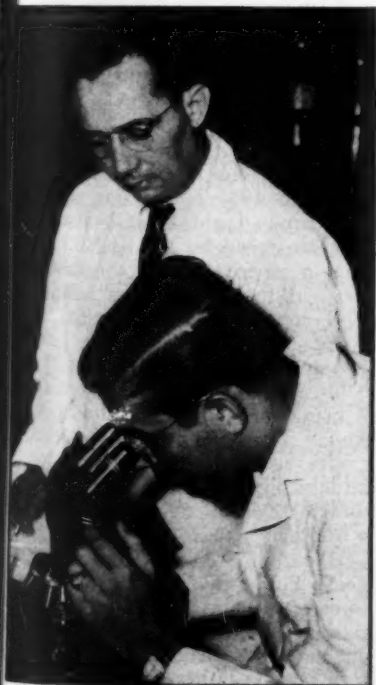
**TIMBER
STRUCTURES
INCORPORATED
ENGINEERING IN WOOD**

Portland 8, Oregon

New York 17, N.Y.

GUEST SCIENTISTS

Two Puerto Rican scientists—part of a contingent of twelve—are seeking remedies for the malnutrition of their homeland in an American liquor distiller's laboratories. The food researchers are working at company expense in the Joseph E. Seagram & Sons plant at Louisville, Ky. Their chief project is learning how to produce high-protein synthetic "beef" from yeast (BW-Aug.14'43,p96) by Seagram's continuous aerobic process. Thus they may ease their national ill and use up Puerto Rico's surplus of blackstrap molasses, from which the yeast can be derived. The research program results from an island company's application for a license to use the distiller's method. Besides granting its free use, Seagram proposed the unique research program.





**"This is
Fighting Pay!"**

Listen you! I'm putting this fist-full of money where it'll do the most good . . . for my boy and yours . . . and for millions like them out there somewhere trying to keep this a fit country to live and work in!

Sure, even during a war, a man and his wife, and his kids hanker for things they've always wanted . . . and yes, many of us could afford them . . . but, until I hear my boy's footsteps on the front porch again, both my job and my pay are in the fight—because it's my fight!

Our one big chance right now, to help win this fight, is to play ball with the Government in its efforts to hold down prices. That means: *Pay Taxes* . . . all we're asked! We've got to pay for this war somehow—and that's the quickest, cheapest way.

Buy War Bonds! . . . all we can. These bonds keep our money safe, with interest, while it's in there pitching.

And we can cooperate with the Government in other ways too! Never bid up a price! . . . Never buy rationed goods without stamps! . . . Buy nothing that you don't *really* need

Folks, if we'll all stick to that simple loyalty code, we'll kill two birds with one stone—we'll lick Hitler and Hirohito . . . and we'll lick *inflation*.

Result: A saved and stabilized America.

FEDERATED HARDWARE MUTUALS
Hardware Dealers Mutual Fire Insurance Company, Home Office, Stevens Point, Wisconsin
Mutual Indemnity and Hardware Insurance Company, Home Office, Owatonna, Minnesota
HARDWARE MUTUAL CASUALTY COMPANY
Home Office, Stevens Point, Wisconsin

-LICENSED IN EVERY STATE



Hardware Mutuals

Stevens Point, Wis. ★ Owatonna, Minn. ★ Offices Coast to Coast

Compensation, Automobile and other lines of

CASUALTY AND FIRE INSURANCE

name) to the present Office of Foreign Economic Administration.

Ickes was made president and is managing the personnel. Last week he named E. Holley Poe, a natural gas man, manager of PRC.

Under its charter, PRC is authorized to buy stock in foreign petroleum companies. On Capitol Hill, there is some curiosity as to whether this charter declaration is sufficient to confer such authority.

CANADA

Utilities Alarmed

Premier's threat to seize big power concern in rate row is causing uneasiness among the others; company will fight.

OTTAWA—Quebec public utility companies are asking, "Who's next?" following the threat of Provincial Premier Adelard Godbout to seize and nationalize the big, wealthy Montreal Light, Heat & Power Consolidated.

● **To Follow Through**—Skeptical at first of Godbout's announced intention, political and business leaders now are swinging to the view that he will follow through with submission of a bill to the provincial legislature authorizing seizure of the \$209,000,000 company, largest in Canada. With a provincial election coming up, Godbout may call the legislature this fall, months ahead of time and try to ride the bill through.

In full-page advertisements in Montreal papers, M.L.H.&P. is defending its position, seeking public support, and challenging the premier's move.

● **Rate Reduction Sought**—Early doubt about Godbout's intentions stemmed from his failure to implement a bill passed in 1941 authorizing seizure of Beauharnois Light, Heat & Power Co., now controlled by M.L.H.&P. Reduction in service rates to consumers was given as the main reason behind the 1941 action and is again cited as the motive for the new proposal.

Actually, close observers of Quebec political trends believe Godbout's hand is being forced by increasing agitation among French-Canadian nationalist groups against the domination of big business in the province by English-speaking elements.

● **Another Attack**—In harmony with Godbout's move is a demand by Quebec's Public Service Board, after a three-year survey, that M.L.H.&P. show cause why its rates should not be based on the investment cost of the company's assets rather than on the value



"7½ million men will be employed
in immediate postwar construction
-if American business makes its plans now!"

Statement by ERIC A. JOHNSTON
President, Chamber of Commerce of the United States

"HOW can private industry open up fields for employment during the difficult transition state after the war?

"Well, there's one industry which won't have a reconversion time lag to overcome—if we all plan now! That's the construction industry. In war and peace, it uses the same type of machines, materials and manpower. All the construction industry will need to go to work immediately are the contracts for the job. Just as there will be a great accumulated demand for consumer goods after the war, so will there be a huge backlog of requirements for rebuilding and expansion of plants, for new housing and public works which have been deferred.

"Employment in new construction, exclusive of maintenance and repair work, will reach a peak after the war of three million men—on the site. In addition, another four-and-one-half million will be employed off the site, in the production and transportation of materials.

"That's seven-and-a-half million good jobs immediately after the war for carpenters, plumbers, bricklayers, architects, electricians, engineers and a host of others—enough jobs to take up the slack in the transition period and prevent mass unemployment.

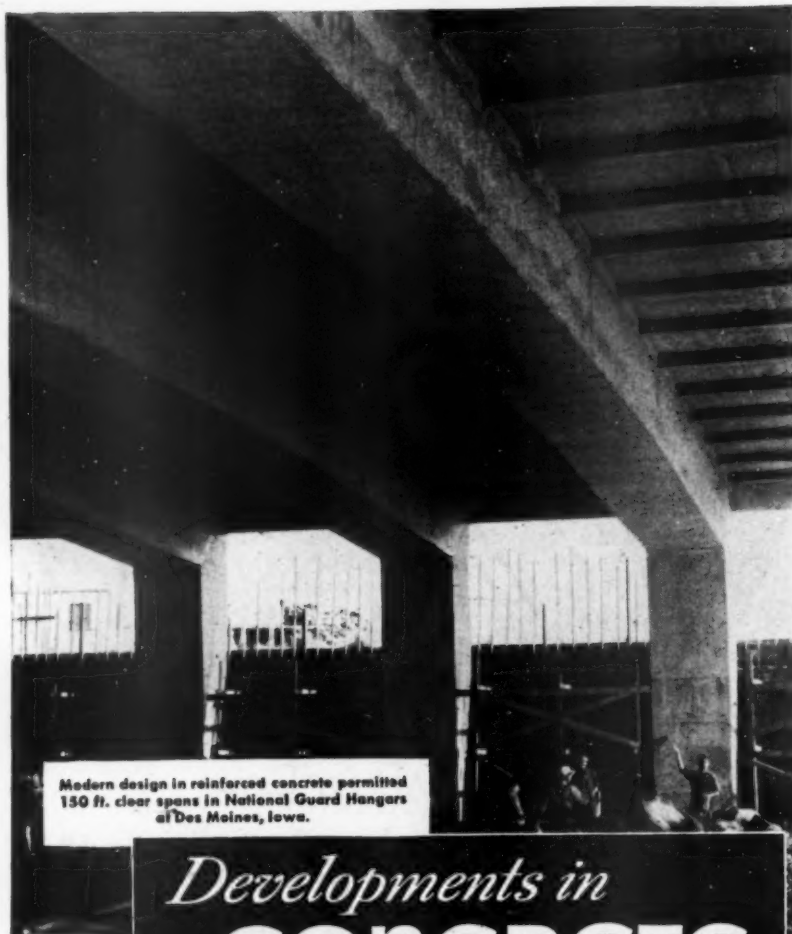
"But those men won't be put to work rebuilding America for a long time after the war unless we plan today. 'We' means individual business men, retailers, wholesalers, manufacturers—all of us. And it means city, county and state governments. Private building will account for about two-thirds of postwar construction—it's the American business man's responsibility to plan with his architect and engineer right now!"



Prepare Plans Now!

What are your postwar building requirements? How big—how difficult—how accurately planned is the job? To get it done right—on time—and at the lowest possible cost, you must plan with your architect and engineer during the months ahead. Call them now!

TRUSCON STEEL COMPANY, Youngstown, Ohio
SUBSIDIARY OF REPUBLIC STEEL CORPORATION



Modern design in reinforced concrete permitted 150 ft. clear spans in National Guard Hangars at Des Moines, Iowa.

Developments in **CONCRETE** *speed war construction*

In laboratory and field, engineers have developed improved design and construction methods which enable cement and concrete to render greater service in war construction. Just as soon as these new methods are proved out in practice, full information is made available free to designers and builders.

IN WAR PLANT CONSTRUCTION

Advanced concrete design is saving time and critical materials in building firesafe, low annual cost industrial plants and military structures.

IN AIRPORT PAVING

Scientific design methods developed for concrete runways are facilitating the construction of airports which give maximum, long life service at low annual cost.

IN COLD WEATHER CONSTRUCTION

To expedite concrete war construction which must be done in winter, latest information on cold weather concreting has been compiled. This information is furnished free to engineers and contractors.

IN OPERATION OF RAILROADS

Working with railroad engineers, methods of forcing portland cement grout into soft spots under mainline tracks have been developed. The grout hardens—stabilizes the roadbed, thus speeding up traffic and saving maintenance labor.

Our concrete technicians are available to assist your engineers with concrete design and construction problems.

BUY MORE WAR BONDS

PORTLAND CEMENT ASSOCIATION, Dept. A10d-12, 33 W. Grand Ave., Chicago 10, Ill.

A national organization to improve and extend the uses of concrete . . . through scientific research and engineering field work

tion at which these investments are carried by the company.

What is proposed is a slash of about 40% in the value of assets involved in the operation of electric facilities to produce a cut of around 25% in electric service rates.

• **Board's Proposal**—Subject to objections from the company, the board proposes to reduce the valuation of assets used in providing electric services from \$114,000,000 to \$70,000,000. After deductions for depreciation, it would allow a net value as the basis of earnings of \$41,000,000 instead of the company's computation of \$85,000,000. Presumably, if the property were taken over, the board's valuation would be used as a guide for compensation.

The company insists that its rates for electricity are lower than those of any similar utility in North America and that they would be still lower if the company were exempted from taxation as is the publicly owned hydroelectric system of Ontario.

• **Substantial Empire**—M.L.H.&P., in addition to having a monopoly of power, electric light, and gas services in Montreal and surrounding communities, is part of a substantial power empire. It owns Quebec-New England Hydro Electric Corp. and Cedar Rapids Mfg. & Power Co., the latter with a 235,000-hp plant on the St. Lawrence.

It has outright control of Beauharnois, large development which forms part of the projected St. Lawrence seaway and power scheme, and Montreal Island Power Co. In addition, it is part owner of Shawinigan Water & Power Co., with which it jointly owns United Securities Ltd., which in turn controls Montreal Tramways Co. and Canadian L.H.&P. Co.

• **Stock Tumbled**—Godbout's threat sent Montreal Power stock tumbling on the Montreal stock exchange. Before the announcement it stood at 25½; it closed a week later at 20½.

WHEAT POOL SUED

Saskatchewan Wheat Pool, cooperative agency of wheat growers in the middle-prairie province, would be nicked for close to \$40,000,000 if a court action pending against it for liquidation of debts to farmers should become the basis of a general demand.

In the period from 1924-29, the pool secured financial aid from farmer members by deducting 2¢ a bushel from its returns to them for a fund to provide elevator facilities, and by withholding an additional 1% of the proceeds from the sale of wheat to establish a commercial reserve fund. The amount deducted runs to around \$19,000,000, and interest just about doubles it.

A test suit has been brought by a pool member for return of amounts deducted from his accounts.

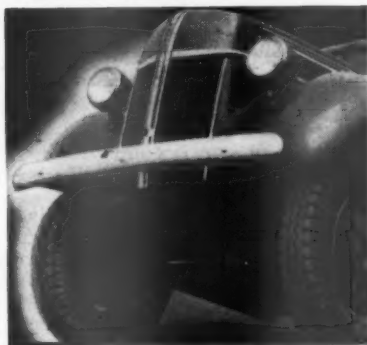


NO "WAR BABIES," THESE!

★ TO THE THOUSANDS of men, in the armed forces, who have experienced the thrill of driving Marmon-Herrington *All-Wheel-Drive* trucks for the first time, the knowledge that the same vehicles were in widespread use, before the war, may come as a distinct surprise.

Now, when almost every truck seen in army convoys drives through all wheels, it is perfectly natural to assume, though wrongly, that *All-Wheel-Drive* is something new—developed exclusively for military service.

Multiple drive trucks were used, even as long ago as the first world war. Marmon-Herrington saw the many advantages in the multiple drive principle of operation and built a highly successful



business with improved designs over a period of ten years before the present war began. Users in road construction and road maintenance, in the oil fields, logging camps and other extra-difficult services, found nothing to equal them. Neither desert sand, marsh mud, winter snow or mountain steeps could stop them.

These were the "Heavy-Duty" Marmon-Herringtons, with capacities up to 25 tons. And, starting in 1935, our company introduced a series of lighter models, consisting of conversions of all standard Ford trucks, commercial cars and passenger cars, to *All-Wheel-Drive*. These have been called the "grandparents" of the modern jeep.

All our energies and facilities are now devoted to the manufacture of trucks, combat tanks and other vehicles for war. But we, as you, are looking forward to the day of Peace—when Marmon-Herringtons will be available to all who need and want them. Back the attack with the purchase of extra war bonds, and help speed the coming of that day.

★ Buy an Extra War Bond — Back the Attack!

MARMON-HERRINGTON

INDIANAPOLIS 7, INDIANA

WAR BUSINESS CHECKLIST

A digest of new federal rules and regulations affecting priorities and allocations, price control, and transportation.

Fats and Oils

New quotas for fats and oils will increase production of civilian supplies of soaps, paints, varnishes, lacquers, linoleums, oil-cloths, felt-base floor coverings, coated fabrics, and most protective coatings. Quotas have been raised from 80% of use in the base period (1940-41) to 90% for household soaps, to 110% for industrial soaps, and to 150% for abrasive or mechanics' soaps. For paints, varnishes, and lacquers, the fats and oils allotment has been increased from 50% to 60% of base-period use. Restrictions (for manufacturers in business before July 1, 1943) do not apply to amounts under 10,000 lb. per quarter; formerly a 6,000-lb. limit operated. Laundry soaps for companies holding laundering contracts with the armed forces are exempt; soaps supplied to public institutions are not. (Food Distribution Order 42, as amended.)

Fiber Shipping Containers

Because of the container shortage (BW—Oct.16'43,p14), the manufacture and use of new fiber shipping containers, the supply of which is about 15% below demand, have been brought under strict control. A new WPB order covers boxes, crates, cases, baskets, and hampers made wholly or in part of corrugated or solid fiber (.060 or heavier); also interior fittings and sheets or rolls of the same materials, used in packaging. The manufacture of retail gift boxes, bottle and can carryouts, and other unessential types is prohibited. Quarterly weighted quotas of such containers used for packing certain products are 65% and 80% of use in the corresponding quarter of 1942. For retail deliveries, use is limited to 80% of quota for mail orders and 65% for other methods of delivery. (Order L-317.)

Repair Parts

Manufacturers of construction equipment have been urged to increase production of repair and spare parts. Most urgently needed are parts for power shovels and cranes, since 95% of new cranes and shovels are required for military use.

Typewriters

War contractors who were required to turn in rented typewriters manufactured since 1935 may now get these back, or an equal number of similar machines, on a rental basis. This ruling is the result of WPB's recent order allowing limited manufacture of typewriters, thus releasing some which were formerly needed for the armed forces. (Amendment 6, Ration Order 4A.)

Sugar

November-December sugar allowances have been increased from 4 lb. to 5 lb. per 100 persons for institutional users who nor-

mally do their own baking. This ruling, announced by the food rationing division of OPA, will affect commercial eating places such as restaurants and hotels and also institutions of involuntary confinement such as prisons and asylums.

Petroleum Products

When sellers of petroleum products at retail take as their ceiling the price of their most closely competitive seller of the same class, they may now take their competitor's present price instead of his March, 1942, price. (Amendment 37, Regulation 137.)

Dairy Feed Payments

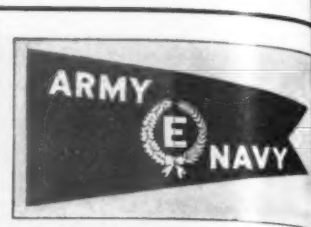
Rates of subsidy payments have been announced for October, November, and December, to offset increases in dairy feed costs since September, 1942, to farmers who deliver whole milk and butterfat (BW—Oct.9'43,p70). Payments range from 30¢ a cwt. for whole milk deliveries and 4¢ a lb. for butterfat in Minnesota, Iowa, and Wisconsin, to 50¢ a cwt. for milk and 6¢ a lb. for butterfat in New Jersey, Massachusetts, Connecticut, Rhode Island, and Southern California. The maximum rates apply to drought counties in Arkansas and neighboring states. Payments will also be made to compensate for September increases in hay prices in the Los Angeles and Memphis areas. To secure payments under the program, the producer must submit to his county Agricultural Adjustment Administration committee satisfactory evidence of quantity of milk or butterfat sold.

Chemicals

Five additional chemicals—oxidized petrolatum, Vinsol resins, methyl abietate (abalyn), hydrogenated methyl abietate (hercolyn), and cellulose sponges—will be placed under allocation on Nov. 1. Orders for the following amounts are exempt: less than 25 lb. of oxidized petrolatum (used as a rust preventive); less than 500 lb. of Vinsol resin (used in sand molds, cement, paper, and other products); less than 450 lb. of methyl abietate and hydrogenated methyl abietate (used as plasticizers in copper bottom paint, rifle and ammunition lacquers); and less than 1,000 cu. in. of cellulose sponge. (Allocation Order M-340, as amended.)

Coated and Combined Fabrics

Specific formulas for determining maximum prices at all stages of manufacture and wholesaling of coated and combined fabrics, as well as the processing of them, have been provided by a new simplifying regulation that removes the fabrics and services from the control of GMPR. Prices will average about the same as those previously prevailing. For products and services sold to the United States and to foreign governments, or for use in the manufacture of commodi-



Auto-Lite Battery Corp.
Long Island City, N. Y.
Dayton Tool & Engineering Co.
Dayton, Ohio
Foote Co., Inc.
Nunda, N. Y.
General Motors Corp.
Warren, Ohio
McElroy Mfg. Co.
Boston, Mass.
Mount Hope Finishing Co.
North Dighton, Mass.
Parkwood Corp.
Wakefield, Mass.
Rawlings Mfg. Co.
St. Louis, Mo.
Reed & Prince Mfg. Co.
Worcester, Mass.
Savage Tool Co.
Savage, Minn.
St. Joseph Lead Co. of Pennsylvania,
Jopetown, Pa.
William E. Wright & Sons, Co.
West Warren, Mass.

(Names of winners of the Army-Navy and Maritime Commission awards for excellence in production announced prior to this new list will be found in previous issues of Business Week.)

ties covered by MPR 403, the base period April, 1943; for all other fabrics and services covered, March, 1942, is the base. (Regulation 478.)

Beef

Federally inspected slaughterers are required to set aside for the armed forces a war service 45% of utility-grade steer and heifer beef that comes within the weight range and other specifications set by the Army for this grade. Of the amount set aside, 80% is to be prepared as boneless meat so as to conserve cold storage space and shipping costs.

Lumber

Increases of roughly 15% have been granted in ceiling prices of northern hardwood and softwood lumber to compensate producers for higher wage costs resulting from the National War Labor Board's approval of higher wages for lumber workers in July. Increases apply to all standard grades of hardwood and softwood species except timbers, and include additions of certain mill-working charges. These price rises, which replace the temporary increase of 10% granted in August, may be passed on to the consumer. (2nd Revised Regulation 222.)

Pulpwood

For the first time, pulpwood produced in Indiana, Illinois, and Missouri has been given dollar-and-cents ceilings, at the high-

prices prevailing during July, 1943. By the same ruling, dollar-and-cents ceilings replace old "freeze" ceilings in Pennsylvania, Maryland, West Virginia, Ohio, and Kentucky. General prices in all eight states will be at the levels prevailing in recent months, although unduly low and high prices under the freeze action are ironed out by the uniform ceilings.

Work Clothing

As part of a program to obtain 10,000,000 pairs of boys' bib overalls, needed by boys on farms, an optional maximum pricing method has been provided for manufacturers of these garments. Prices so arrived at are above the prevailing level, but compensating decreases in prices of other work clothes will be effected if a forthcoming survey of the industry indicates that such decreases are possible. (Amendment 4, Regulation 208.)

Ship Maintenance and Repairs

To cope with the work involved in keeping every essential ship in operation (BW—Oct. 24, p. 30), a simplified procedure has been worked out to permit operators of all vessels except pleasure craft to secure materials for maintenance and repairs. Operators may obtain these materials from any dealer or marine distributor who has set up an inventory on WPB 646, by certifying on purchase orders that the material is to service an essential craft. No priority rating is needed. Controlled material orders, as well as preference rated orders, may be obtained in this form.

Other Priority Actions

The effective date of Schedule VI of WPB order L-216, relating to manufacture of vises has been postponed until Jan. 1, 1944. . . . Orders for pea and chestnut anthracite for heating poultry brooders and hatcheries have been given preference. Solid Fuels Administrator Harold L. Ickes has announced. . . . Luggage with a factory price of less than \$1.50 (excluding taxes) has been removed from the production quota restrictions of WPB's Order L-284, by an amendment to that order.

Other Price Actions

A 6% temporary increase in ceiling prices for certain weights and sizes of men's and boys' knitted union suits and other knitted underwear, sold by jobber mills, has been authorized by OPA Amendment 4, Regulation 221, to relieve a severe shortage in these garments. . . . Manufacturers of household brooms made wholly or partly of broomcorn have been allowed an increase in their maximum prices of 3¢ a lb. of the total weight of the broom under Order 777, Regulation 188. . . . Assemblers of watches containing imported movements may secure reimbursements for increases over specified actual costs of the movements, and are not limited, as heretofore, to increases over costs of movements that were delivered during or after March, 1942; but foreign invoice prices before Aug. 1, 1941, may not be used as a basis for costs, nor may increases in foreign invoice prices after Apr. 30, 1943, be added to maximum prices. (Revised Order 1, Maximum Import Price Regulation.)

GREEN HANDS—OLD HANDS

both produce more . . . and better!



Among the important outgrowths of the War has been the solution of industrial "green hands" problems through use of modern instrumentation. Foxboro Measurement and Control Instruments have so simplified countless exacting production steps that new-trained workers can produce accurately, on schedule.

Where "old hands" still are on the job, improvements in production efficiency are even more striking! With guesswork and tedious detail work removed by instruments, all the workers' skill and experience can be applied toward better, faster output!

Foxboro Measurement and Control Instruments simplify any operation demanding critical temperature, pressure or flow rate. They automatically supply exact guidance . . . furnish graphic records wherever needed . . . often wholly replace manual control.

Plan now to boost your plant efficiency higher than ever before, by equipping the exacting production steps with Foxboro Instrumentation. The Foxboro Company, 120 Neponset Avenue, Foxboro, Mass., U. S. A. Branches in principal cities of U. S. and Canada.



"For outstanding production". The Foxboro Company has been awarded the Army-Navy "E" Pennant.

FOXBORO

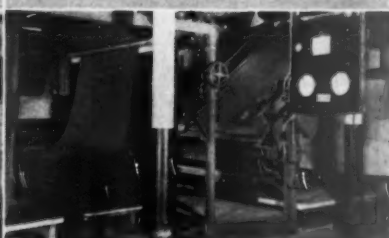
Reg. U. S. Pat. Off.

MEASUREMENT AND CONTROL SYSTEMS

Exactly uniform heat-treating becomes practically routine, with Foxboro Potentiometer Controllers on pit-type furnaces.



Foxboro Humidity Controllers and Recording Tachometers on textile dryers automatically insure correct quality-control and tallying.



PRODUCTION

Indium Scores

Soft, silvery metal adds many war jobs in such fields as alloying and plating; it's dear, but a little goes a long way.

Glimpses of a new and possibly broad field for indium—a soft, silvery metallic element used in a growing variety of alloys—can be seen between the lines of a statement authorized after severe editing by the military censorship—the coating of ferrous metals for resistance against corrosion and abrasion:

"The latest development to be announced by the Indium Corp. comes as a result of two years experimental work in conjunction with the Propeller Laboratory at Wright Field . . . an alloy coating for the new hollow steel propeller blades. This indium alloy finish is on a large number of blades that have been finished for this purpose. The suitability of the finish for service tests has been tested. Water spray tests to investigate abrasion-resistance and salt spray tests to determine corrosion-resistance after being subjected to abrasion were completed."

• **Process Still Secret**—Although such an indium-alloy-finished prop blade is on display this week at the National Metal Congress in Chicago, the censored statement contains all that can now be said in a journal of national circulation. How the coating is applied and what the other metals of the alloy are must remain military secrets for the present.

Significance of the statement lies in the fact that the metal (which gets its name from its characteristic indigo blue line in the spectrum) has until now been pretty well restricted to adding new qualities to nonferrous metals—silver, gold, copper, nickel, lead, tin, zinc.

• **Expanding Field**—First commercial use of indium was for dental alloys; indium-gold makes inlays with greater strength, ductility, and immunity to discoloration.

Second commercial use was found in indium-gold hinge pins of spectacle frames which proved immune to "freezing" caused by perspiration.

Biggest wartime use to date is in the main bearings of engines for airplanes, tanks, jeeps, etc. Steel "backs" are electroplated with silver, followed by successive electrocoatings of lead and indium, the latter being deposited to a thickness corresponding to 4.5% of the weight of the lead coating.

• **Metals Fused**—Since indium melts at the low temperature of 311F, well be-

low the 621F melting point of lead, a slow, two-hour heat treatment of the bearing at a temperature somewhat above 311F causes the indium to diffuse into the lead, forming an alloy of the two metals that is harder, more resistant to abrasion and corrosion than either alone, and providing a bearing surface of unusually high quality.

Although pure indium is softer than lead and can be chewed without apparent toxic effects like so much gum, just 1% of it added to lead increases the tensile strength of the latter from approximately 1,600 psi. to between 2,400 psi. and 3,000 psi.

• **Alloying Virtues**—Added to either gold or copper, indium lowers the melting point, increases hardness and strength; copper takes on almost the tarnish-resistance of gold.

Added to silver solders and other brazing alloys in quantities as minute as 1% to 2%, they take on new "wetting" properties, particularly when used on steel, and increased adhesion.

Electroplated in a thin "flash" coating over nickel-plated steel and other metals, indium closes pinholes, prevents corrosion from starting at such points.

• **Last Peacetime Job**—About the time that the automotive industry was being converted 100% to war production, Studebaker finished the bright work of a few hundred of its final 1942 cars with,

silverplating, tarnish-proofed with indium plating (BW—Mar. 28 '42, p. 60).

Fact is the current price of \$10 a troy ounce for the versatile metal (it cost about 30 times that 20 years ago when it first went into dental inlays) seems to be not much of a hurdle to its use. A little goes a long way.

It takes only 0.00016 troy ounce of electroplated indium to protect a square inch of silver against tarnishing, and only about \$1.50 worth for an aircraft engine's main bearing.

• **Looking Ahead**—Postwar civilian use promises to cover a wide range: plating for metal lipstick holders and other cosmetic containers, glass coloring, electrical contacts, low-melting alloy automotive bearings, tarnishproof light reflectors, jewelry, whatever.

Indium is even being rolled into thin foil for secret military purposes thought to have postwar civilian applications in electrical equipment.

Of prime interest to jewelry and silverware-manufacturers is a new alloy of silver and indium which has so little of the latter in its composition that it can be labeled "sterling silver, 925/1,000 fine"; an identification bracelet made of it has shown no tendency to tarnish on the sweaty wrist of a soldier in the Southwest Pacific.

• **Three Producers**—Production of elemental indium, a byproduct of smelting certain zinc ores, is in the hands of three companies: Indium Corp., New York (jointly owned by Oneida, Ltd., and Anaconda Copper); American Smelting & Refining Co.,



MASS AND MIGHT

Being readied at Schenectady, N. Y., for shipment to the Geneva Steel Works, Utah, is a 7,000-hp. motor described by its maker, General Electric, as the world's most powerful—

capable of lifting a naval destroyer to a height of 15 floors in a single minute. At the \$150,000,000 Geneva plant—built for Columbia Steel Co., a U.S. Steel subsidiary—the massive coupler (above) will be hooked to the reversing rougher of a plate mill.

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New York; and National Zinc Co.,
Hartlesville, Okla.
Production of indium trichloride, the
salt used in electroplating, is in the
hands of Indium Corp., which controls
the plating patent situation and is re-
sponsible, since its incorporation in
1934, for the bulk of indium research
and application.
No Scarcity Foreseen—Figures on pro-
duction of metal and salts are military
secrets. The fact, however, that they
have been more than doubling every
year for the last five years lends credence
to the belief of Indium Corp.'s presi-
dent, founder, and chief researcher, Dr.
William S. Murray, that all wartime
needs will be covered—even to coatings
on steel military props.

Vanishing Ink

Argument over process to
de-ink paper enters the halls of
Congress as Cromwell asserts
WPB gave him runaround.

Much of the thinking in the paper
and pulp industry this week runs along
the lines of thoughtful wishing that the
new process for de-inking paper demon-
strated by James H. R. Cromwell last
week before the House Committee on
Interstate & Foreign Commerce might
be used to de-ink the uncountable tons
of newsprint used to report the event.
Paper Men's Viewpoints—"Not," says
one paper mill operator who has been
experimenting with it, "that Jimmie's
Chemwood process won't de-ink paper,
because it will. My gripe is that the
first lot of chemicals he sent us did a
superior job; the last lot wasn't even as
good as the caustic soda we have always
used previously."

"Crux of the matter," says an experi-
enced paper technologist, "is that a new
de-inking process gets a big play in the
papers every year or so and then is for-
gotten until the next one comes along."

The Beginnings—Roughly the facts
behind the demonstration are these:
Francis H. Snyder, the inventor of the
process, and Cromwell formed the firm
of Cromwell, Snyder & Co. last year,
operated a pilot plant in Washington,
retained Arno W. Nickerson, New York
chemical engineer, as consultant, be-
sought paper and pulp mills to adopt
the process and the chemicals that go
with it, got a few takers on an experi-
mental basis.

This year, they went after govern-
mental support for their project through
Arthur Wakeman, director of WPB's
pulp and paper division, but, said Crom-
well to the House committee, "Mr.
Wakeman has always taken the position
that his duty was to ration the supply
of pulp and not to increase it. Since no



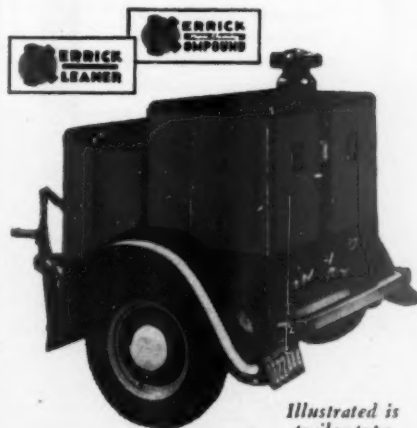
Kerrick Kleaners are saving up to 80% of the man hours required to clean trucks, airplanes, machinery, factories and to do scores of other necessary military and production cleaning jobs.

Years of successful experience in solving automotive and industrial cleaning problems prepared Kerrick Kleaners for their vital wartime assignment. Now they speed production of war materials, save precious hours at front line maintenance bases, cut costs of removing dirt and stubborn grease on everything from small parts to entire factories.

Heat, water detergent and friction are scientifically combined in Kerrick Kleaners . . . better cleaning, faster and cheaper, is the result.

Stationary and portable types, and a wide range of special cleaning compounds, are setting today's standards for efficient steam cleaning of any type surface.

Other Clayton products serving the Armed Forces include: Flash Type Steam Generators—Hydraulic Dynamometers—Hydraulic Liquid Control Valves—Boring Bar Holders and Boring Bars.



Illustrated is trailer-type Model L-OET

CLAYTON
MANUFACTURING CO.



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A BIG CONTRIBUTION TO SPEED...



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● Delays and drudgery vanish from the drafting room with this modern photo-copy method that reproduces everything drawn, printed, written or typed.

● Clean, sharp copies of pencil drawings, rough sketches, marked details—also durable tracings on linen or vellum—all can be made quickly, exactly, by the Hunter Electro-Copyist.

● Protect valuable originals—let copies take the punishment of frequent use. Slash the time required to get designs into the shop. The Hunter Electro-Copyist turns out, in minutes, tracings that may formerly have required days. No camera, no lenses, no focussing, no dark-room—your office boy can operate it.



OUR NEW BOOK tells you what the Hunter Electro-Copyist will do in the engineering and production departments, and in other industrial applications. Send for it today.

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FIRE CHIEF

A patented Hooperwood "Engineered Canvas" permanently resistant to fire, water, weather, mildew and wear.

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BALTIMORE, MD.

**HOOPERWOOD
COTTON DUCK**

action could be taken by any federal loan agency without a letter of recommendation from the pulp and paper division, and since its director held that the writing of such a letter was not within his jurisdiction, the situation became just another Washington run-around."

● **Just for the Emergency**—Before the committee, Cromwell, a former minister to Canada, was frank to admit doubt that "de-inking mills would find it profitable to de-ink old newspapers on a commercial basis" under normal, nonwar conditions, but submitted that utilization of his company's process would conserve a large percentage of the 700,000 tons of Victory box packaging in which the Army sends its supplies to the fighting fronts, recover both wax and pulp from an annual production of 350,000 tons of heavily waxed stocks, recover a considerable percentage of the annual production of 250,000 tons of wet-strength paper for maps, charts, and other technical military uses, and reclaim every year pulp equivalent to a belt of trees a mile wide stretching from New York to Washington.

Over 300,000 tons of annual de-inking capacity, long since installed in this country, are evidence of the economic soundness of de-inking, but its grist is old magazines and books, carefully selected to keep the proportion of groundwood stock down to a couple of per cent.

● **Caustic Process**—Operators of de-inking mills point out that printing ink

can be cooked out of papers made sulphite or soda pulp successfully without the commonly used caustic soda solution; groundwood pulp like that used in newsprint and some containers become yellow and brittle under the same treatment.

General feeling in the pulp and paper industry is that the new process should not receive government subsidies, direct or indirect, but take its chances in the hands of private enterprise.

Sand Stretcher

Economy is achieved in steel foundry through resin binder used in molds that reduces sand requirement 75%.

When the Army turned to steel castings for the armor of tanks and other combat vehicles last year, most steel foundries worked on a prewar rule of thumb calling for half a ton of new silica sand to make a ton of castings.

● **Saves Three-Fourths**—This fall a large steel foundry is turning out armor steel castings at the rate of 5,000 tons a month with only 600 tons of new sand less than a quarter of the 2,500 tons it might have been expected to use.

Back of the saving (which is important in view of overburdened facilities for extracting, grading, and transporting sand) is a pine wood chemical, called



SIDESTEPPING DANGER

Racing against time to beat winter freezes, engineers are rushing work on a big project that involves changing the Delaware River's course and moving the Erie Railroad tracks 155 ft. Its purpose is to sidestep uncontrollable landslides that have dropped sand and stone to the tracks near Lordville,

N. Y., for two generations. By cutting 187,000 cu.yd. of earth from one river bank and filling it in on the other side, Senior & Palmer engineers are creating a new grade. The road-bed's sweeping curve will thus be shortened and the white patch of sand on the hillside can then slide down harmlessly. About 3,000 ft. of tracks will be relaid by Dec. 1.

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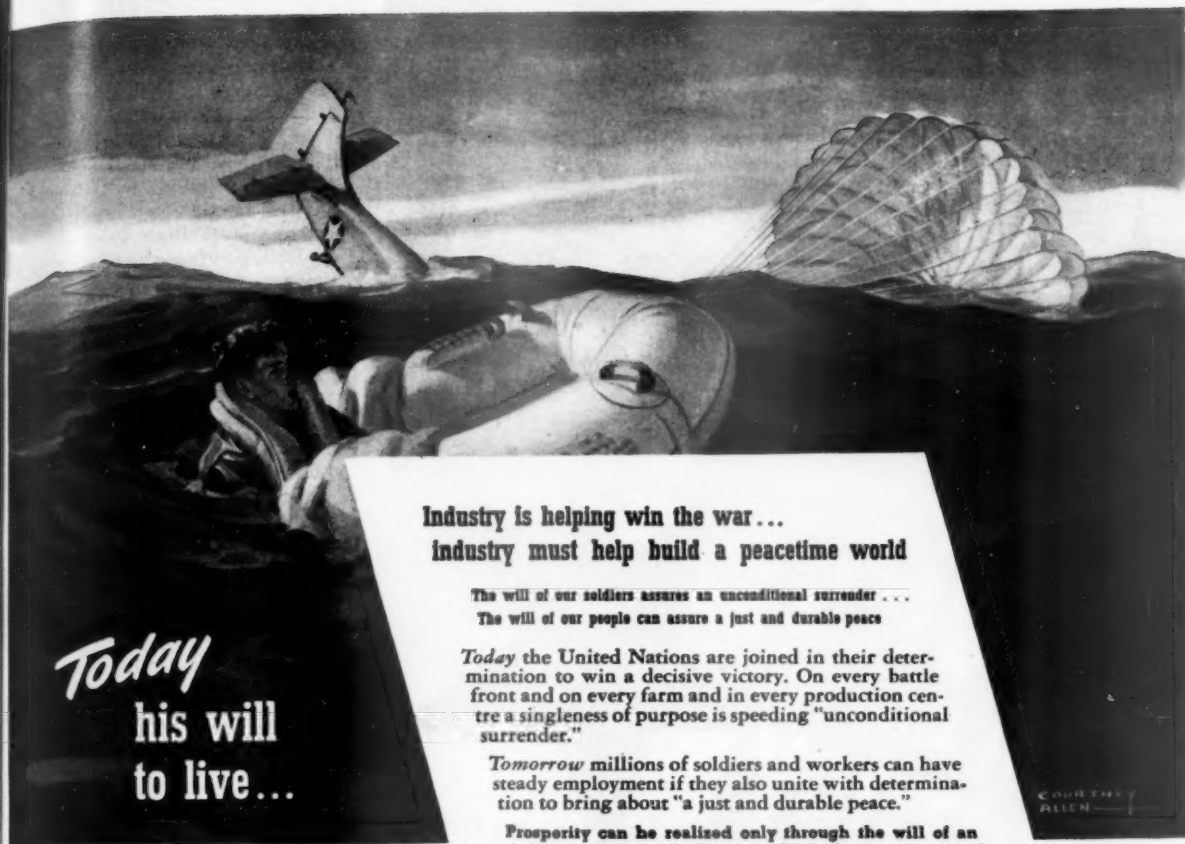
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3, 1943



Today
his will
to live...

**Industry is helping win the war ...
Industry must help build a peacetime world**

The will of our soldiers assures an unconditional surrender ...
The will of our people can assure a just and durable peace

Today the United Nations are joined in their determination to win a decisive victory. On every battle front and on every farm and in every production centre a singleness of purpose is speeding "unconditional surrender."

Tomorrow millions of soldiers and workers can have steady employment if they also unite with determination to bring about "a just and durable peace."

Prosperity can be realized only through the will of an informed and a united people. With their courage and their determination, the people's will to accomplish a righteous peace is irresistible.

People here, in common with people of other lands, can prosper materially and spiritually after the war ends—but only if now the peoples of the United Nations make loud their demands for "a just and durable peace."

THE INTERNATIONAL NICKEL COMPANY, INC.
Subsidiary of The International Nickel Company of Canada, Limited
New York, N. Y.



Tomorrow
his prayers
are answered





That our planes may fly faster and farther—that our jeeps and tanks and guns may roll where the going is toughest—the Oil Industry is today performing miracles of production.

But without valves, not a pint of gasoline nor an ounce of synthetic rubber could be produced.

In this, however, as in every other branch of industry through 97 years, Powell was ready with valves of correct design and material to meet every demand imposed by new processes and increasingly exacting service conditions. That's why today Powell Valves are truly serving as Links in the Chain of Victory.

Powell Valves

THE WM. POWELL COMPANY
CINCINNATI, OHIO



Truline Binder, developed in 1935 and only gradually introduced to foundry use. And back of it are years of research by its manufacturer, Hercules Powder Co. of Wilmington, Del., into uses for the dark, insoluble fraction of resin which is left after the lighter, more soluble fractions have been extracted.

• **Concrete Stabilizer**—As Vinsol resin the dark fraction goes into concrete and becomes a stabilizer for highways that minimizes surface checking and spalling after frosty weather. As an extender for some of the more expensive synthetic plastics, it saves scarce chemicals and reduces all-over molding costs.

In a finely powdered form, as Truline Binder, the dark fraction is mixed with either new sand or (preferably) sand reclaimed after casting, binds the sand grains together to form cores for molding in the manner of linseed oil, another scarce item.

• **Bakes Faster**—Hercules researchers and technicians believe their binder bakes faster than others, produces accurate cores "strong enough to resist the molten metal when it is poured into the sand," yet combustible enough to be "destroyed by heat after casting to permit easy removal of the sand from the core cavity" and to permit reclamation and re-use of the sand.

They estimate that the foundry gets its monthly 1,900-ton saving of new sand through the use of only 150 tons of 200 tons of their binder.

Penicillin Stride

Successful crystallization of drug's sodium salt leads to hope of its early synthesis, but WPB isn't relaxing.

Substitution of a synthetic chemical method for the present slow and cumbersome natural process of producing penicillin took a major step forward when E. R. Squibb & Sons announced that it had successfully crystallized the pure sodium salt of the new wonder drug. Significance of this is that production of a pure salt was necessary before chemists could begin the "degradation studies" which generally lead to the disclosure of the structural chemical formula of new materials.

• **Others Seek Same Result**—There have been reports in the pharmaceutical industry for several months that other companies working on penicillin, including Merck and Charles Pfizer, also had produced some crystalline material, but Squibb was the first to make a public announcement. In fact, the Squibb announcement formed a major part of the company's annual financial report for the fiscal year ended June 30.

Notwithstanding this new develop-



YOUR PERSONNEL PROBLEMS WILL BE SIMPLIFIED BY AN

Appropriate Employee Pension Plan

Improved management-employee relations are a natural consequence of a correctly designed employee pension plan. These are the basic benefits your firm could obtain from such a plan soundly financed through investment in insurance company annuity contracts or in securities:

1. Reduces labor turnover. By its nature, a pension plan rewards long, faithful service.
2. Attracts and holds high type employees. The employee is afforded benefits supplemental to

Social Security payments which are based only on earnings up to \$3000.

3. Eases Wage Problems. A pension plan provides positive financial value to the employee, yet is in line with governmental anti-inflation trends.

A 92-page summary of the fundamentals of formulating and financing pension plans is now available. There is no obligation entailed in writing for this study, so send for your copy now and have the facts available when you need them.

THE CHASE NATIONAL BANK OF THE CITY OF NEW YORK

Pension Trust Division

Telephone HANover 2-9800

11 BROAD STREET

NEW YORK 15



Brand NEW

This hand operated 'Budgit' Chain Block is as modern as today. In creating it, past designs were forgotten. The light weight comes from the modern design and the liberal use of alloy steels. Equipped throughout with anti-friction bearings, with it loads may be lifted easier and faster.

Perfect lubrication is always assured, for all working parts are totally enclosed and operate in grease keeping out dust and dirt. The roller-type load chain does not stretch, stiffen nor bind.

It hangs in perfect balance with or without load. The automatic brake controls the load under all conditions. Loads cannot descend unless the operator pulls on the operating chain in the "down" direction.

Size for size, it weighs much less than other standard spur-gear blocks. For example, the smallest weighs only 48 lbs. The two-ton 'Budgit' Chain Block weighs 81 lbs.

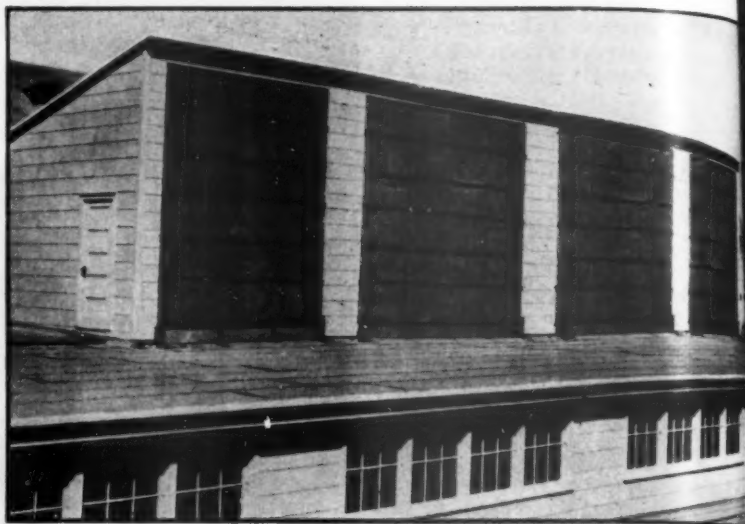
'Budgit' Chain Blocks are built to lift up to $\frac{1}{4}$, $\frac{1}{2}$, 1 and 2 tons and prices start at \$59.50 list. Send for Bulletin No. 357 containing complete information.



'BUDGIT' Chain Blocks

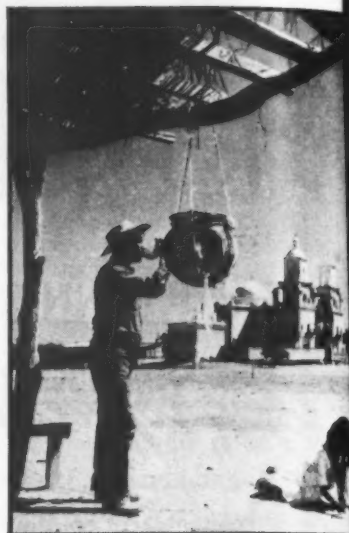
MANNING, MAXWELL & MOORE, INC.
MUSKEGON, MICHIGAN

Builders of 'Shaw-Box' Cranes, 'Budgit' and 'Load Lifter' Hoists and other lifting specialties. Makers of Ashcroft Gauges, Hancock Valves, Consolidated Safety and Relief Valves and 'American' Industrial Instruments.



INDIAN WATER MAGIC

For centuries, desert Indians have known the trick of keeping their drinking water cool in large porous earthen jars, called ollas (right). And now Consolidated Vultee, unable to get refrigeration equipment, has borrowed the trick to cool the Tucson (Ariz.) plant. Ollas are chilled when desert winds evaporate the water that seeps through to the outside of the jar. The big cooler (above) consists of excelsior pads moistened by water with huge blowers sucking in a million cubic feet of air a minute. And even when it's 105 in the shade outside, hangars stay at an even 85.



ment, government agencies pushing the production of penicillin are still building up natural process capacity to assure the vast immediate military requirements for the drug. If a shorter synthetic method can be worked out in the interim, so much the better.

• **WPB Authorities**—Responsibility for boosting penicillin production by whatever means now rests with Fred J. Stock, head of the drug section in WPB's chemical division. Working with him is Dr. A. L. Elder, Syracuse University chemist, who has been acting as a WPB chemical division consultant for several years. Dr. Elder is completing a tour of all plants producing penicillin and will soon investigate all new companies who want to enter the field.

The ticklish question of disseminating secret production information among the various companies in the field is a problem for Dr. Elder to weigh. At a recent meeting of the newly formed WPB penicillin industry advisory committee, composed of representatives of the 17 companies, it was de-

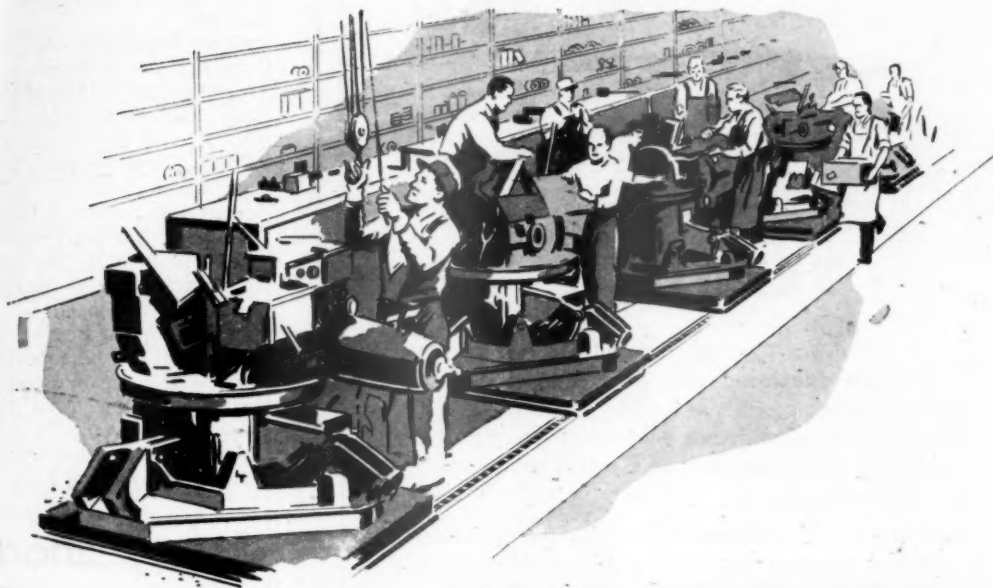
cided that each company would give up of its secret information to Dr. Elder in confidence.

• **Proposed System**—After the WPB chemical expert completes his inspection of production facilities, he will determine what secret production information he believes should be passed from one company to another. Then he will seek the permission of the company possessing the "secret" to pass it along.

As in the case of anything new and dramatic, there has been a rush on the part of a lot of companies—both inside and outside the drug and medicinal chemical field—to get into penicillin. Since it takes large amounts of strategic metals, such as stainless steel, to go into production, WPB controls all entries.

• **Everyone Considered**—Broadly speaking, WPB men feel that the concerns which are either producing the drug or have approved projects for its production ultimately will be able to meet all requirements. However, WPB is taking no chances; all companies wishing to

DOES *One Part* THAT'S "A.W.O.L." SLOW UP YOUR PRODUCTION ?



RIGHT now, when peak production is most vital, is your output being curbed by missing parts? Do failures to maintain proper precision and quality standards in difficult parts cause rejections that slow up your assembly lines?

Contact KAYDON

For present or postwar product improvement . . . for more production at lower costs, now and in the future . . . Kaydon precision facilities and experience in producing difficult parts may be the answer to your problems. Here, specially designed metalworking machinery for large or small precision parts . . . modern heat-treating and flame-hardening equipment . . . plus engineering facilities for designing and building special machinery . . . are at your service, to help improve your output and products.

**CAPACITY
Immediately
AVAILABLE
for ball and
roller
BEARINGS
Size 6" to 60"**

For excellence in production
of extremely precise, unusually
large ball and roller bearings.



THE KAYDON ENGINEERING CORP.

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Specialists in Difficult Manufacturing



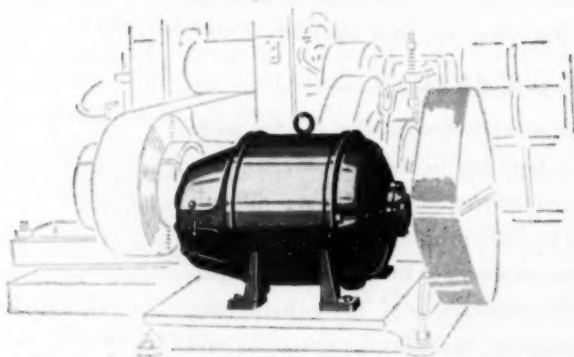
TENSION!



Tension Control can be an important production factor in the processing of such materials as metals, paper and cloth, which are wound on drums or cores. Tight, evenly-wound rolls and uniformity of the finished product often depend upon it.

All of the characteristics necessary to maintaining proper and constant tension control are inherent in Reliance Electric Motor-Drive.

The pioneering work done by Reliance engineers in putting motor-drive to profitable use along these lines proves again that motor-drive *can be more than power*. The results of their experience are available to you at any time.



Reliance Motor-Drive for Tension Control contributes substantially to quality and uniformity of the finished product, eliminates troublesome clutches—and lowers costs.

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RELIANCE ELECTRIC & ENGINEERING CO.

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Houston • Los Angeles • Minneapolis • New York • Philadelphia • Pittsburgh
Portland (Ore.) • St. Louis • San Francisco • Syracuse • and other principal cities.

enter the field are being investigated to find out their potentialities.

WPB's allocation of the penicillin supply indicates that production in September was 50% above August, and October probably will show a 60% increase over September. While these sharp percentage increases, production is still far below requirements because the whole program had to start from scratch.

• **Two Expansions**—Among recent construction developments were the breaking of ground by Hayden Chemical Co. for a million-dollar plant in Princeton, N. J., and the purchase by Chas. Pfizer of a refrigerating plant in Brooklyn which will cost \$750,000 and be completely converted to penicillin.

Among the many short cuts to penicillin production that are being tested is a special type of freezing and drying apparatus developed by National Research Corp. of Boston. Each new development will be important to the one or several companies seeking to meet a particular problem, but the smash headline story on penicillin will contain the inevitable announcement that someone has synthesized the drug.

Safety Shortage

Lack of manpower, raw materials, and facilities retard production of industrial safety devices; Army demand hurts.

There just isn't enough industrial safety equipment available to meet current war-expanded demands. As in many other industries, the chief reasons are insufficient manpower, raw materials and facilities.

• **New Workers Need More**—Another major factor is the influx of new workers—men, women, and youths—who require considerably more safety equipment than skilled workers. In addition, the armed forces require large quantities of certain specialized types.

For example, military requirements for respirators cleaned out the factories for weeks before the North African invasion. And WPB, of course, couldn't give industry any explanation for the shortage of respirators, goggles, and glass for civilian war workers.

• **To Combat the Shortage**—WPB suggests all possible repairs to present equipment in an effort to spread protection as widely as possible while shortages exist, and is urging industry not to overbuy or hoard safety devices.

Industrial purchases of new safety equipment during 1943 will amount to about \$100,000,000. Among the major items are 9,000,000 pairs of goggles, 6,000,000 pairs of safety shoes, 4,000,000 respirators, 1,750,000 hard hats, 1,000,000

COAL RECOVERY

A reclamation project started last week by Stevens Coal Co. on a huge pile of mine waste about ten miles from Pottsville is expected to yield 1,000,000 tons of small-sized anthracite to help relieve the eastern fuel shortage.

Other coal companies in the Pennsylvania hard coal belt are watching the experiment with interest and have their eyes on similar, but smaller accumulations near their collieries if it does prove practical.

The particular pile now being worked is on the property of the Philadelphia & Reading Coal & Iron Co. Most of its coal content is tiny particles, unmarketable when mined about 50 years ago. Demand has developed for smaller pieces, however, with the wider use of stokers and blowers.

A spokesman for the Stevens Co. estimates they will get sufficient coal from the operation to heat 100,000 homes all winter.

100 face shields, and 1,000,000 welding helmets.

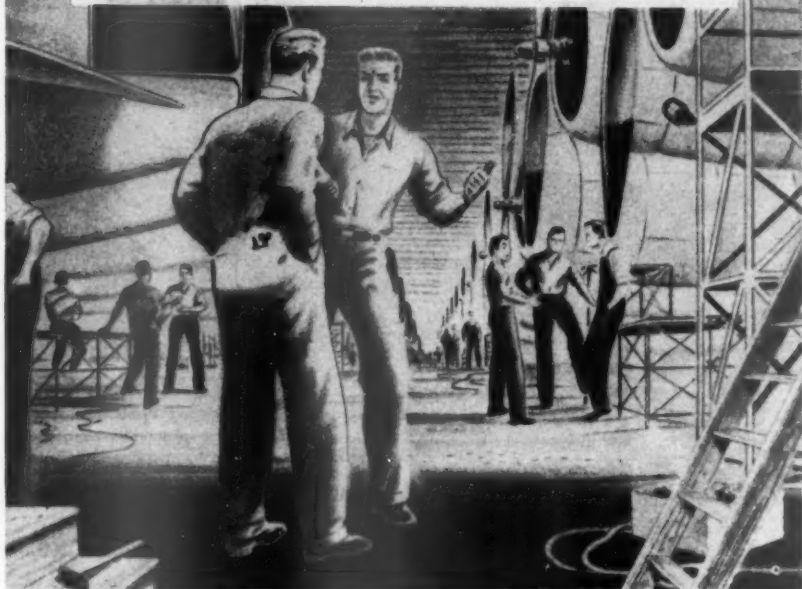
Correlation High—Average amount spent by industry for safety equipment was \$3.80 per worker last year. The chemical industry led with \$6 per capita and showed the fewest number of accidents. This close correlation between equipment and accidents is shown in other industries, lumber, for example, having the highest accident rate and a relatively low average spent for safety.

WPB's survey showed the following per capita amounts spent by the major manufacturing industries for safety equipment in 1942:

Chemicals	\$6.00
Merchant ships	5.75
Aircraft mfg.	5.22
Iron and steel	5.11
Automotive	4.53
Stone, clay, glass	4.40
Petroleum	3.98
Machinery, not transportation	3.50
Paper	3.19
Lumber	1.93
Rubber	1.76
Food	1.75
Construction97
Textile91
Public utilities75
Tanning, leather61

Materials Restrictions Shift—Restrictions on raw materials that may be used in safety equipment change as the supplies of raw materials fluctuate. Failure to find a substitute for nickel plating obliged WPB to permit its use in goggles. Abundance of magnesium ended restrictions on its use.

A SLOWDOWN STRIKE THAT *Workmen* *Did Not Call*



Assembly stopped—men waiting—precious hours lost. This slowdown wasn't called by workmen—nor was it sabotage.

A run of parts that wouldn't fit caused the stoppage. It could have been prevented by an adequate gaging policy and inspection practice.

Parts that don't fit cause losses in production, wasted man hours, excessive scrap and rework time that are many times what adequate inspection would have cost.

* * * * *

Sheffield, authorities in Dimensional Control, can help you formulate a sound gaging policy whereby you can gage 100% of your product at a cost insignificant in comparison to the expense of not doing it.

War—Master of Speedup

Goaded by shortages in materials and manpower, today's manufacturers are treading the same critical paths that beset industry during the last war. Results are similar, but amplified—better, faster, and cheaper methods of processing. And many old con-

cerns, set in their ways, have been forced to adopt new methods or go out of business—thus acquiring a new lease on life, a toehold on the postwar trade era. But despite improvements, some jobs (lower left) are still performed faster by hand.



Bakelite masks that protect aircraft engine parts from paint sprays (BW—Aug. 28 '43, p. 30) are now applied "on the fly" at Ford's Detroit plant. With the new use of a belt conveyor (above), machine sections and working parts

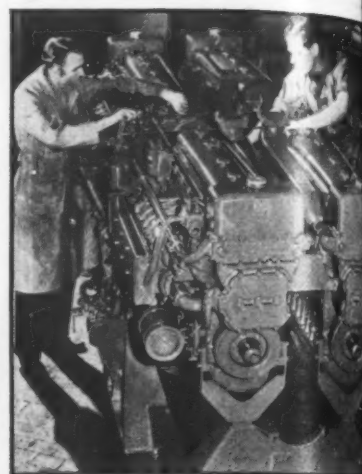
are covered six to ten times faster than by bench methods. Matched sets of masks permit instant selection of the proper protector for each part. The conveyor carries the masked sections directly to the painting room.



Carl King cuts out leather, rubber, and cloth bomber parts faster by hand than he could using any machine so far designed to replace manual cutting. His speedup ideas have won him many cash rewards at Consolidated Vultee's plant in Downey, Calif.



One of several new profiling machines in a plant of the Overton Co. shapes 18 military gunstocks to master patterns at a crack. Machines, which are built both by Salstrom Carving Machine Co. and by J. S. Richardson Co., are equipped with Graham variable



Using a newly developed gearbox which permits the connection of four engines to a single propeller shaft, General Electric engineers are converting six-cylinder diesel units—exactly like those used in trucks and buses—into power plants for military landing barges. Details of the engine combination, designated as the Quad, remain a Navy secret. It not only permits the engines to operate as a single unit but eliminates reversing gears when used with a controllable pitch propeller. In addition, the compact arrangement saves space for fighting personnel and war equipment.

speed drives for controlling carriages that sweep the stocks past routing cutters. A speed range of 50-to-1 allows slow motion on intricate contours, instant speedups on straight cutting. After the war, the profilers will carve wooden oars, plastic antennas.

buy more
war bonds



MASTER SPEEDRANGERS

On many applications, variable speed operation offers tremendous advantages. Thousands of alert engineers, like you, have found that the Master Speedranger provides this infinitely variable speed in a compact, all metal unit of proven reliability.

For example, each of the machines shown above use three Master Speedrangers which, in addition to providing the most advantageous speeds, have added greatly to the flexibility, compactness, economy and appearance of the machine.

The Speedranger, on the drive unit on this application, incorporates also a gear reduction unit and an electric brake . . . all designed and built by one manufacturer as an integral, compact power unit. Furthermore, the Speedranger can be supplied in enclosed, splash proof, fan cooled or explosion proof construction, and for flange mounting, or with its construction modified so that the mounting possibilities are practically unlimited.

No other variable speed unit on the market today can give you such flexibility and compactness.

The next time you need a drive for material processing, handling and conveying equipment; mixers and agitators; welding positioners; machine tool drives; testing and calibrating equipment . . . to name only a few . . . see what a really remarkable job Master Speedrangers can do for you.



THE MASTER ELECTRIC COMPANY • DAYTON, OHIO

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Another FIDELITY Machine war-born with peace-time applications—perhaps for you

If you have many small metal parts which have had to be sorted and handled manually in large quantities—you will be interested in this adaptable basic machine which FIDELITY has made in a number of variations.

The parts are dumped into a hopper from which they are fed out in single or multiple tracks, in correct position for the next process. In some cases, sequential steps are taken care of by additional mechanisms or attachments, made integral with the automatic hopper and feeder element.

The machine illustrated sorts and delivers copper slugs through eight tracks at the rate of 20 slugs per minute per track—a total of 160 per minute.

Receiving trays, platforms or troughs in such machines can generally be designed to function also as piece counters or batch boxes.

The range of FIDELITY'S developments in special machines designed and built to solve unusual and special production problems is described briefly in "Machines and Mechanisms."

A copy of this book is available if you write on your business letterhead.

★
*Designers and Builders of
Intricate, Automatic Precision Machines*

32 YEARS' EXPERIENCE

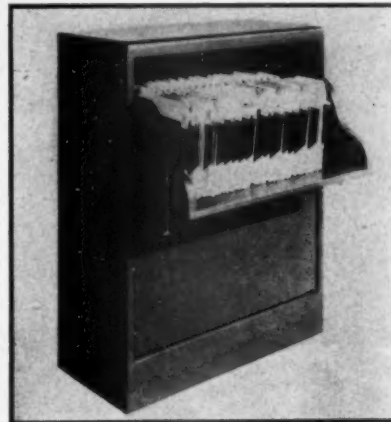
FIDELITY MACHINE COMPANY

3908-18 FRANKFORD AVENUE
PHILADELPHIA 24, PA.

NEW PRODUCTS

Rock-a-File

Most apparent departure from orthodox filing practice to be found in the Rock-a-File, new product of Rockwell-Barnes Co., 35 E. Wacker Dr., Chicago 1, is the replacement of sliding drawers with side-opening compartments. You swing one outward and



downward, and there are the contents in full view with all the filing-folder tabs evenly "jogged," orderly, and in easy reach.

Less apparent is the fact that you can place a side-opening file (it comes in one-, two-, three-, and four-compartment models, both letter and legal size) in locations where drawer-type files would be practically unusable, as for instance along narrow corridors, in alcoves, and small closets. Even when all compartments are open at one time, such a file does not tend to become unbalanced and tip over. The Rock-a-File is also available in space-saving desk models for 3x5, 4x6, or 5x8 cards.

Saf-t-Bra

Comfort and protection are promised women workers by the Saf-t-Bra, a new lightweight, ventilated brassiere developed by Willson Products, Inc., Reading, Pa. It is so designed that the washable plastic cup for each breast extends well back under the arm to "prevent possible injury of the delicate and sensitive lymphatic glands. . . . Adjustable wide web suspender harness prevents strain on neck muscles." It is available in three sizes.

Floor Patcher

Last year the Walter Maguire Co., Inc., 330 W. 42nd St., New York 18, brought out Cortland Emery Aggregate, an additive consisting of abrasive emery grains for portland cement to be used in putting nonskid surfaces on concrete

floors. This month, the company bringing out Emeri-Crete, a new packaged blend of finer emery particles in a quick-setting binder for filling cracks, small depressions, ruts, or other imperfections in concrete or cement floors. Mixed with water and applied in accordance with directions, it promises not only to "make repairs permanent" but also to permit "use of the floors in 10 or seven hours after the repair has been made."

Plastic Coat Hooks

When brass and bronze became scarce the U. S. Navy's Bureau of Ships adopted Plastic Coat Hooks molded out of Teflon II (Tennessee Eastman's cellulose acetate butyrate) by Pyro Plastics Co., Westfield, N. J. During wartime, these new conveniences are made only in regulation navy copper-brown color; come postwar, they may be molded for civilian



in standard hardware hues of red, green, blue, ivory, and black. That they may permanently compete with metal is evidenced by the fact that four of them are injection-molded at a time in approximately 50 sec., or 12½ sec. each—fully as fast as wire can be bent and threaded into a hook, considerably faster than bronze hook can be molded and cast in sand.

Heat Sealer

If your packaging volume runs too small for mechanized heat-sealing, or you can't get delivery on a machine to do the job, you might try a new hand tool developed by Pack-Rite Machine Division, Techtman Industries, Inc., 828 N. Broadway, Milwaukee 2. Called the Multi-Use Sealer, it is essentially an electrically heated iron, 5 in. long and ¾ in. square, inserted at a slight angle into a heat-resistant handle, equipped

flexible connecting cord and three-
switch.
For flat sealing of overlapping bands
and labels of heat-sealing material, use
the side of the iron; for spot sealing of
packages, overlays, etc., use the square
of the iron. For sealing pinch-type
ends, tops of bags, envelopes, etc., slip
them under a spring clip which comes
attached to one side of the iron. There
also available a clamp for wall or table
mounting.

Emulsion Cleaner

Effectiveness of alkaline cleaners is
to be heightened if greasy, gritty
metal parts are given an advance dip in
Enthone Emulsion Cleaner, new formula-
tion of the Enthone Co., 442 Elm St.,
New Haven 2, Conn., plus an advance
water rinse. The liquid, which comes
ready for use, is described as an "emul-
sion solvent . . . of high penetrating
power," particularly effective in remov-
ing "metallic dust, carbon, dirt, drawing
compound fillers." It also comes as En-
thone Emulsion Cleaner Concentrate to
be mixed with several volumes of solvent
and used in the same manner.


New Products Briefs

Also reported this week, not only for
their interest to certain designated busi-
ness fields, but also for their possible im-
port in the postwar planning of more or
less allied fields and business in general,
are the following:

Aviation—Clifford Mfg. Co., 564 E.
St. St., Boston, announces production
of new Aircraft Engine Radiators (Pres-
sure type) and Oil Coolers for the Army
Forces. They are made of aluminum
brass, "saving two-thirds the weight of
copper units of the same size and
rating."


Textile—U. S. Patent No. 2,330,251 is
the property of Celanese Corp. of Amer-
ica, 180 Madison Ave., New York. It
covers a new method of fireproofing tex-
tiles made of cellulose acetate or other
organic derivatives of cellulose. The
process consists of impregnating the ma-
terial with a halogenated alkyl ester of
phosphorus by immersing it in a hot
bath of the chemical to which pine oil
and water have been added.

Printing—Spherkote, a new and "en-
tirely different tympan paper," comes
from Minnesota Mining & Mfg. Co.,
251 Paul 6, Minn., with a coating of
small glass spheres or beads, each as
smooth and perfectly shaped as a glass
marble, yet so minute that 50,000 are
required to cover a square inch of sur-
face. Actual production runs "on all
types of rotary and perfecter presses" are
said to have proved the ability of the
paper to "reduce offset, improve print-
ing quality, reduce the number of stops
for wash-up, reduce wash-up time, lower
production costs."




"LET'S GET ON WITH THE WAR"
These FREE BOOKLETS Will Help . . .


These 5 free booklets on **dag** colloidal graphite can help you in more ways than one. Each covers a different use or group of uses for **dag** products in industry. If you haven't used **dag** colloidal graphite or don't know all these uses meet Mr. **dag** today by writing for one or more of the booklets. Just clip the coupon.




1




2



3



4



5

1-BULLETIN No. 421 ASSEMBLING AND RUNNING-IN ENGINES AND MACHINERY

Lists 10 advantages of adding **dag** colloidal graphite to liquid lubricants for these operations and tells why with photographs, charts, and simple, non-technical text.

3-BULLETIN No. 423 HIGH TEMPERATURE LUBRICATION

How **dag** colloidal graphite takes over when the going gets too hot for conventional liquid lubricants. Gives examples in forging, oven conveyors, kiln cars, bottle and die casting machines, etc.

5-BULLETIN No. 430 GENERAL BOOKLET—The story of **dag** colloidal graphite. 12 pages fully illustrated. Gives the how and why of colloidalization, explains the various liquid carriers and suggests dozens of places where **dag** dispersions can speed up production.

2-BULLETIN No. 422 PARTING COMPOUNDS

Tells how **dag** dispersions prevent objectionable freezing, rusting or sticking together of metals and other materials. Cites use on screw threads, lamp bulbs, aviation and diving equipment; also in glass, rubber and foundry industries.

4-BULLETIN No. 431 "dag" COLLOIDAL GRAPHITE FOR IMPREGNATION AND SURFACE COATING

of textiles, asbestos, felt, abrasives, porous metals, paper, wood, etc. to impart lubrication properties, electrical conductivity, opacity, color, or other desirable qualities.



**ACHESON
COLLOIDS
CORPORATION**

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Port Huron, Mich.

Please send me free copies of the bulletins checked below:

No. 421 ☐ NAME _____
No. 422 ☐ COMPANY _____
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Our Present Oil Supplier Is _____

(Lubricants containing **dag** colloidal graphite are available from major oil companies.)

Take a Look at TOMORROW-*Today*

Get the *PROTECTION* of CENTURY SPLASHPROOF MOTORS

Engineered to provide full protection for indoor or outdoor installations against the effects of splashing liquids, water from plant washdowns, and falling solids, Century Splashproof Motors are also available with special insulations for use in atmospheres charged with abnormal concentrations of acids or alkalis.

Splashproof is only one example of the many Century Motor types, from fractional to 600 horsepower. And today, under the demands of War, finer Century Motors are being produced than ever before. Now—and after Victory—look to Century for *all* your electric motor requirements.

CENTURY ELECTRIC CO.
1806 Pine Street St. Louis 3, Missouri

*Offices and Stock Points
in Principal Cities*



Mr. Now: We wash down the plant every day but these Century Splashproof Motors keep a-runnin'.

Mr. Postwar: I'm gonna remember Century for *all* my tough jobs.



If you have not received our new bulletin on polyphase motors, write for it at once.

Ceilings Approved

Overproduction of luxury crops believed headed off by price lid on fresh fruits and vegetables.

After a fortnight of seesawing, Economic Stabilization Director Fred M. Vinson gave his blessing last week to a program of the Office of Price Administration and the War Food Administration for putting price ceilings on fresh fruits and vegetables.

Recommendations Are Accepted—The ceilings finally announced are substantially unchanged from those which OPA and WFA jointly recommended to Vin-

son. Vinson is going along with the idea (more WFA's than OPA's) that prices on "essential" crops like snap beans, carrots, spinach, and tomatoes couldn't be cut back as severely as cauliflower, celery, cucumbers, green peppers, and such (BW—Oct. 16 '43, p. 84).

Because of this, the impact of the rollback on the Bureau of Labor Statistics' cost-of-living index won't be as

severe as it would have been if the essential vegetables, for which it is heavily weighted, had borne the full brunt of the slash.

• **Won't Affect Index**—In fact, the immediate effect of the ceilings on the index will be practically nil. Some vegetables—snap beans are a good example—are now selling at, or even below, the new ceiling prices.

What the ceilings will do is prevent a repetition of last year's experience when a 55% increase in prices of fresh fruit and vegetables boosted the index during the winter months.

• **To Guide Growers**—OPA rushed through the announcement of country shipping prices to guide growers in fall planting. Wholesalers and retailers will be given their markups later.

But by announcing the prices it expects to prevail at retail levels as a result of the rollback, OPA has given distributors a pretty good idea of what's in store for them.

By using the same zoned-price, basing-point system developed for cabbage and lettuce, OPA expects to get dollar-and-cents ceiling prices—or a good approximation thereof—at retail on all fresh fruits and vegetables. Even the citrus fruits regulation is now being revamped along basing-point lines.

• **Veiled Threat**—Although commercial truck growers don't like price ceilings any better than anybody else, they admit privately that if the ceilings hadn't come through when they did, next year might have seen a glut of Persian melons and cucumbers, acute shortages of some of the less glamorous but more necessary items.

This year WFA managed to convince growers that they should go heavy on the essential crops. WFA's exhortations were larded with strong hints that anybody who failed to conform might have trouble getting fertilizer, crates, and even shipping space.

As the Dept. of Agriculture's production estimates show (table, left), growers took this counsel to heart and planted just about what they were told.

• **Everybody Cleaned Up**—Without price ceilings, however, WFA might have had trouble selling the same line a second time. Growers found they had a tough time no matter what they planted as far as fertilizer and crates were concerned.

But with no lid on prices, everybody—growers, middlemen, retailers—cleaned up on the reduced acreage of luxury crops to a tune that invited heavier plantings in 1944.

Admittedly, growers didn't lose money on the essential crops, either. Last April, string beans were selling in

WINTER LIMITS

Prices on the 13 fresh vegetables OPA put under ceilings last week may not be much below present levels, but they will be a lot lower this winter than they were last—even after permitted seasonal increases. Generally, luxury crops will be trimmed closer than the ones WFA rates essential.

Some luxuries haven't been hit as hard as others because OPA and WFA couldn't go below the legal minimums established by Congress (parity or the top price between Jan. 1 and Sept. 15, 1942, whichever is higher), and these were higher on some vegetables than on others. On one crop—peas—the legal minimum is so high that the ceilings won't bring any price reduction, may even require a slight increase.

Here are rough estimates of how much retail prices of the 13 vegetables will be cut back from last winter's highs:

	Percent Change
Lima beans.....	—20
Snap beans.....	—20
Cabbage*	—35
Eggplant.....	—50
Lettuce*	—30
Carrots.....	—10 (or less)
Cauliflower.....	—50 to —60
Celery.....	—70
Cucumbers.....	—35
Peppers.....	—50
Peas.....
Spinach.....	—10 to —15
Tomatoes.....	—30 to —50

* Rollback was started earlier this summer and is simply incorporated in the new regulation.

In addition to this rollback, OPA has served notice that five more fruits and vegetables will come under ceilings soon—beets, asparagus, watermelons, cantaloupes, and the 1944 onion crop. Still later, OPA will get around to sweet corn, broccoli, brussels sprouts, turnips, rutabagas, kale and other greens. Peaches, apricots, and other seasonal crops will be slapped under ceilings next spring as fast as they come along.

eastern chain store supermarkets at 35¢ and 40¢ a lb. In only one instance—carrots—did WFA's advice result in a planting big enough to break the market.

But, by and large, the returns on the necessities were nowhere nearly as alluring as on the luxuries. If OPA hadn't stepped in with ceilings, the almost-certain result would have been a bumper crop of cauliflower this year.

HOW THEY PLANTED

Growers harkened to the War Food Administration this year, planted pretty much what they were told. Here are estimated production and acreage of commercial truck garden crops for fresh market in terms of the percentage change from 1942:

	Production	Acreage
Artichokes.....	—3	—8
Asparagus.....	—4	0
Lima beans.....	—7	—8
Snap beans.....	+10	+17
Beets.....	—3	+2
Cabbage.....	—14	—4
Cantaloupes.....	—17	—26
Carrots.....	+34	+35
Cauliflower.....	—23	—15
Celery.....	—10	—10
Sweet corn*.....	—3	+1
Cucumbers.....	—31	—26
Eggplant.....	—18	—15
Escarole.....	—17	+4
Kale.....	+58	0
Lettuce.....	—8	—13
Onions.....	—20	—20
Green peas.....	—4	—10
Peppers.....	—2	+4
Spinach.....	—7	0
Tomatoes.....	+2	+2
Watermelons.....	—28	—34

* Three states only.

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Corn for War

Production officials urge cut in hog feeding next year as processors of grain will be sure of adequate supplies.

Army, Navy, and top war production officials all are warning the War Relocation Authority House against letting hogs eat so much corn that processors of the grain will lack raw material in 1944 as they had in 1943. Under Secretary of War Robert P. Patterson, Under Secretary of the Navy James Forrestal, and War Production Board Chairman Donald M. Nelson all urge immediate and corrective action in addition to government stockpiling of 50,000,000 bu. of corn to be earmarked for wet and dry processors.

• **Present Effort**—The War Food Administration is appealing to farmers to sell corn under its guarantee to pay the any increase in corn ceilings prior to Nov. 30 on corn marketed from Sept. 28 through Oct. 31. A similar guarantee in July yielded 35,000,000 bu. which supplied processors through September. War Food Administration hopes to garner at least an equivalent amount this month.

WPB officials scathingly indict the inflated hog for impeding the war program. They have charts, tables, and text depicting its hampering influence on war industries ranging from adhesives and asbestos to iron ore and petroleum. They charge that WFA directives to date have been palliative.

• **Bill of Particulars**—Some of the points in WPB's indictment are these:

(1) That because corn isn't moving out of deficit feed areas, the shipping of iron ore on the Lakes has been dangerously reduced in priorities to import Canadian wheat for feeding livestock in such dairy areas as the Northeast.

(2) That by pre-empting grain needed for alcohol and rubber production, the hog compelling the use of tankers for the transportation of Caribbean molasses for industrial alcohol whereas these tankers otherwise could have been used for shipping petroleum from Gulf ports.

(3) That by retarding the production of cascin, through the excessive feeding of skim milk to hogs, it is necessary to import cascin from Argentina for use in the manufacture of adhesives needed in the production of paper, textiles, plastics, V-belt, prefabricated houses, building materials for defense housing, and paints.

• **Suggested Steps**—WPB officials demand a sharp reduction in the production of hogs. This would be accomplished by cutting profits to be made on hogs by (1) upping the ceiling price on corn, or (2) reducing the ceiling price on hogs.

The current corn ceiling is approximately \$1.07 a bu., Chicago; the hog

ceiling is \$14.75 a cwt., Chicago. corn-hog ratio of nearly 14 to 1. As with the theoretical break-even ratio of 10 to 1 or 11 to 1. Wartime ceiling for the ratio in the Corn Belt was 1 to 1 in October last year.

Official Goal—To conserve feed, the Food Administrator Marvin Jones is asking hog producers to limit 1944 output to 100,000,000 head compared with 125,000,000 in 1943. Officials realize, however, that in view of record-size 1943 corn crop in principal Corn Belt states, it may be necessary to take action on prices.

Kraut Is Out

Packers' stocks are frozen. Army needs are filled, and it portends a lonesome winter for civilian tables for spareribs.

Civilians' last hope of getting any commercial sauerkraut this year faded last week when the War Food Administration froze packers' stocks until military requirements of 3,500,000 cases (12 cans) are filled. With most kraut packers getting about half as much cabbage as usual, says the National Kraut Packers Assn., there will be very little kraut left for the civilian.

Scarcity of Cabbage—There's no dearth of cabbage; the U. S. Dept. of Agriculture estimated on Sept. 1 that the "northern states" crop would total 1,000,000 tons, compared with 390,100 tons last year and 399,500 tons for the 1941 average.

Reason for the kraut shortage is the tremendous demand for table cabbage, the difference between price ceilings on the table crop and on the kraut crop.

Table cabbage is picked early to obtain the small, green, relatively loose heads usually preferred by the retail trade. Kraut cabbage is allowed to mature in the field, and while farmers normally get about \$5 less a ton for it, they make as good a profit because the heads are firmer and heavier (up to 12 lb.) as they mature.

Big Table Sales—Ordinarily there's little competition between buyers of the two types, but this year because of the shortage of other fresh vegetables, heads weighing up to 10 lb. were sold for table use. One shipper reported selling a load of "table" cabbage that averaged only 10 heads per 50-lb. sack.

As kraut packers tell it, buyers of green cabbage "swooped down on the heads like vultures," paying farmers \$30 a ton, which they could well afford because of their \$2.90-a-hundredweight rate to retailers.

Held to Ceiling—Packers, however, are held to the \$12-a-ton, 60¢-a-hun-

dredweight ceiling which WFA announced last April, with the understanding that kraut prices would be adjusted accordingly. (No kraut ceiling has been established yet; theoretically, at least, each packer is operating under maximum prices as of March, 1942, at which time he was paying \$7 a ton for cabbage.)

As a result, packers are nearly idle now—at what should be the height of their packing season. One 58-year-old company, Christ Sievers, Inc., Chicago, reports that by the first week in October it had packed only 300 barrels, compared with the 3,000 it would normally have packed by that date.

One of the largest New York companies reported its pack as of Oct. 5 as only 300 tons, compared with 10,000 tons in the same period last year. A Wisconsin firm, the Shiocton Kraut Co., reports its current pack as 50% of normal.

Price Lid Lifted—On Sept. 28, WFA announced that packers could pay \$22 a ton for cabbage, and again promised that the March, 1942, ceiling on kraut would be adjusted accordingly. This may yet assure some cabbage for packers, but weather conditions will determine how much they get.

While the \$22 ceiling will salvage some profit for packers who work on contracts and managed to make some of them stick, it's no help to the smaller outfits which always buy their cabbage on the open market but haven't been able to touch any of it this year for less than \$35 to \$40 a ton.

Army Pays Ceiling—That's where the freeze really hurts. Now that the Army is their sole buyer, packers can only expect to sell their product at a ceiling price—still to be announced—based on the \$22 ceiling on cabbage. Those who had to pay nearly twice that much to compete with table cabbage buyers are just out of luck.



While harvesting their beds through the "R" months, oyster fishermen now find their biggest worries are prices, manpower, and container shortages.

Oysters Are In

Harvest, now hitting full stride, may be close to normal if prices aren't controlled; but the services get first pick.

Fear of an OPA price ceiling that would drive oyster fishermen into more lucrative wartime employment is the big cloud overhanging the oyster industry as the 1943 harvest swings into full stride. Barring such a development, the industry won't fall far short of the normal annual crop of 90,000,000 lb. of meats, despite labor stringencies.

Take What's Left—That doesn't mean that oysters will be plentiful in the public markets, for the civilian consumer will take what is left after the armed forces have skimmed off the first 40,000 gal. a week. But it does mean that oyster-packing plants can achieve something approximating normal operation—if their containers hold out.

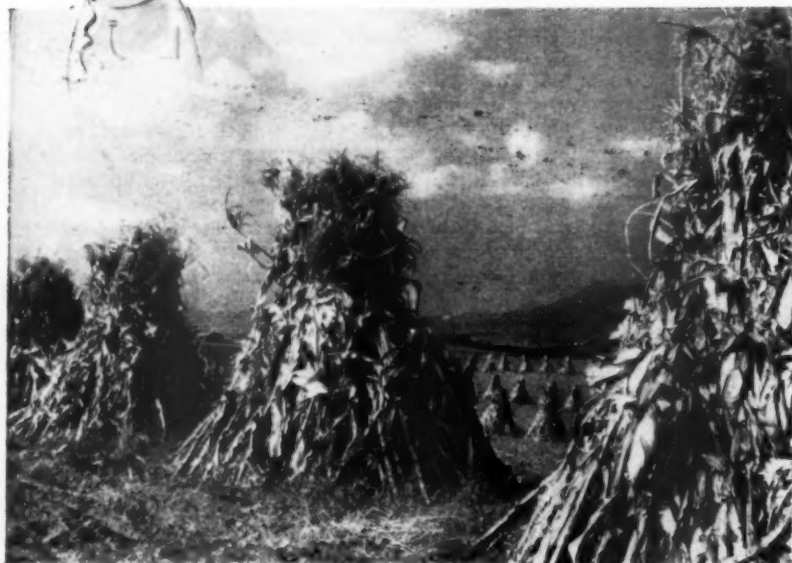
Containers could prove a bottleneck. Metal containers are rationed, glass is of limited suitability, and fiber containers (for shorter shipments) are available only in limited quantity and must be ordered several months in advance. Boats are no problem; the Navy took few of them because oystering vessels are ill-suited to Navy needs.

Where They're Found—Chesapeake Bay and Long Island Sound have the most valuable oyster beds in the United States, although oystering is carried on also in inshore waters along the Atlantic seaboard southward from Massachusetts, on the Gulf Coast, and on the Pacific Coast (principally Puget Sound).

Maryland and Virginia top other states in both quantity and value of output. The Long Island Sound industry, however, shows a much higher



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ratio of value to output because a larger proportion of the oysters is destined to wind up on the half shell and thus command a higher price than the Chesapeake shucking stock.

• **Half Are Cultivated**—Commercially cultivated oysters account for well over half the country's supply. Oyster culture is particularly intensive in the North. Long Island Sound oysters are transplanted as many as five times (from seedbeds to growing grounds to fattening grounds, etc., to improve their edibility on the half shell) before they are ready for market. The important beds in that area are just beginning to show signs of full recovery from the 1938 hurricane. Ordinarily this would mean a supply of larger and fatter oysters this year because it takes five to six years for the oyster to mature in those waters. But many of the planters depleted their beds last year by selling even their three-year-olds to take advantage of the big prices that were offered.

Manpower problems hold fewer terrors for the industry since oyster fishermen and shuckers were given deferred draft status. But the competition of war industries—particularly in the South where shuckers are commanding and getting double their normal pay—is a continuing threat.

Too Many Eggs

Government manages to unload shell stocks, but drop in demand for dried product poses tougher problem.

It looked for a while last week as though government food men might never get their eggs unscrambled.

Several thousand cases of shell eggs had been put up for auction and scorned by the trade. Even more serious was their second egg problem, for Uncle Sam was under contract to buy some 30,000,000 lb. to 40,000,000 lb. more dehydrated eggs than he could find use for.

When the Food Distribution Administration offered for sale a surplus of between 15,000 and 17,000 cases of shell eggs in the Northeast, it found no takers. Dealers, able to buy fresh eggs, refused to buy storage eggs unless they knew whether they had gone into storage last March or at what time since then.

Observers figured that if the FDA did not regrade the eggs it would have to sell them as Grade C. But FDA was holding out for a higher price. An alternative was to sell them to freezers who could grade the eggs when they opened them for freezing.

• **Purchasers Appear**—By the end of the week, however, about 15 of New York's

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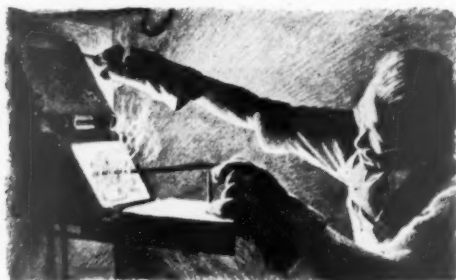
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Greenwich Street egg merchants had got up their courage to bid on the government hoard. Prices ranged in general from 33¢ a doz. for No. 1 standard to 51¢ for No. 2 extras on the 10,578 cases sold, virtually in line with prevailing open market prices.

Presumably most of the eggs will go to freezers. But since the eggs must be regraded before delivery, some may be sold to dehydrators or shell egg retailers.

But food experts recommend freezing. Bakers don't like to admit it, but they can and do use frozen eggs that are less than fresh with complete satisfaction. Dehydrators, on the other hand, can use only first quality, fresh eggs. These keep two to three months when dried, although they may be used in cooking when considerably older.

• **Dried Egg Surplus**—FDA officials find the dehydrated egg problem a tougher one to solve. The dilemma: While consumer channels are actually suffering from a shortage of fresh eggs, quantities are constantly being bought by dehydrators and sold as dried eggs to the government whose claimant agencies, chiefly Great Britain, are not coming through with orders in quantities previously described as necessary to meet 1943 needs.

Not so long ago, FDA was pushing

production of dried eggs as hard as possible. It granted top priority orders on necessary equipment for dehydrators and even omitted cancellation clauses in contracts for buying eggs so that processors could obtain bank credit more easily. That's why FDA is on such a spot now.

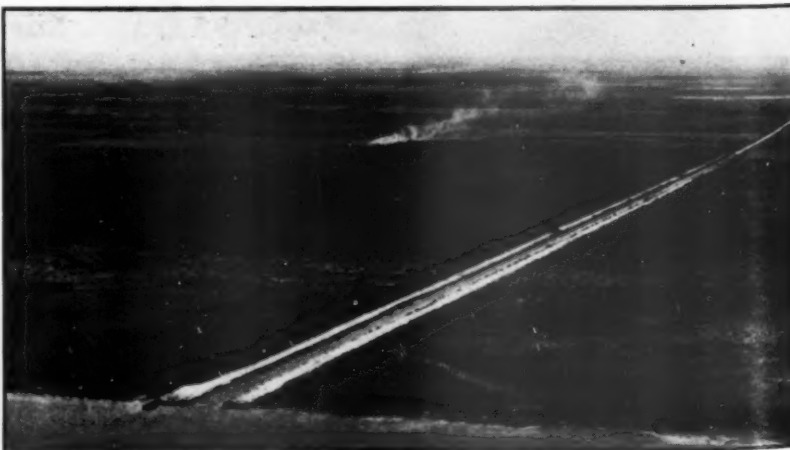
To date there has been no favorable response to FDA's request to dehydrators to cut production 50% voluntarily. Reasons, obviously, are economic; the processors have to fulfill their commitments and protect their investments.

• **Switch to Dried Milk?**—One possible out for processors would be a shift to production of spray-dried whole milk to which egg-drying equipment would be adaptable. There is considerable demand for this product, although there is an adequate supply on hand of the roller-dried milk which is used for animal feed.

Catch to this is that processors probably could not turn their egg-breaking equipment in on the accessory appliances for milk drying in the face of the present shortage of dairy equipment. And, in any event, milk dehydration would not absorb 50% of the present capacity for drying eggs, now figured at 300,000,000 lb. to 400,000,000 lb. a year.

BEFORE AND AFTER

Seen from a plane, Florida's Everglades looks like a hopeless agricultural waste. But in one sector 100,000 acres of luxuriant farms (right) are bearing the fruits of constant reclamation in two to four crops yearly. The secret of the swamp's amazing fertility is its 15-ft. layer of peat, which must be kept moist to keep it from burning spontaneously (below) but dry enough to permit growth. Surveys show that canal drainage can reclaim another 400,000 acres of the 2,600,000-acre Everglades.



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PREVIEW OF TOMORROW'S POWER

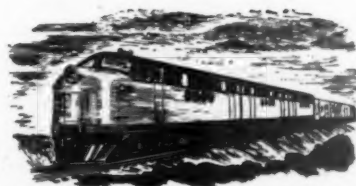
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MARKETING

Margarine Push

Consumers, with interest kindled by rationing along with scarcity of butter, start drive to repeal old U. S. imposts.

When New York's Mayor Fiorello H. LaGuardia goes to Washington next week to appear at hearings on the Fulmer bill (HR 2400) to repeal federal taxes on margarine, he will represent a new element—the consumer—in a battle which has been fought for 57 years by the dairy interests on one side, and the soybean, cottonseed oil, and margarine producers on the other.

• **Taxes Come to Light**—Appearance of consumers on the side of repeal in what has long been almost exclusively a fight between two lobbies stems directly from the wartime shortage of butter and its resultant high point value. Turning to margarine at 4 red points a lb. from butter now at 16, housewives have awakened to the fact that they must pay high federal taxes and license fees.

Enacted in 1886 as protective legislation for dairymen, federal margarine levies include a per pound tax of 10¢ on colored margarine, 4¢ on uncolored; license fees of \$600 a year for manufacturers, \$480 for wholesalers who sell colored margarine and \$200 for sale of uncolored; \$48 from retailers for sale of colored margarine and \$6 for uncolored.

• **Kitchen Blenders**—Consumers are doubly annoyed that the differential between colored and uncolored margarine leaves to them the job of coloring their own in the kitchen if they use margarine as a butter substitute.

Although in a good many states, notably Pennsylvania, California, and Wisconsin, state taxes are more prohibitive than federal levies, consumers are grumbling to their congressmen in Washington this year because 1943 sessions of state legislatures have ended and 1944 will be an off year.

• **Status Quo Disturbed**—The coming of new blood into the battle has thrown new life into both lobbies, which, fighting it out between themselves, had come to a stalemate of late years. When Rep. Hampton P. (Margarine) Fulmer of South Carolina and Rep. August H. (Butter) Andresen of Minnesota agreed over a year ago not to push any legislation on either side, they merely underlined the stalemate.

Since then, margarine manufacturers and their suppliers have been too preoccupied with the prosperity derived

from generous fats allocations (180% of 1941-42 average), government orders, and sales opportunities resulting from butter shortage to campaign vigorously for elimination of the punitive taxes. Producers of leading brands were selling all they could make, so they could afford to wait for what they believed would be the inevitable consumer reaction.

• **Dairymen Blow Cold**—Butter interests are being further undermined by the fact that a number of big cheese, evaporated, and dried skim milk producers have begun to wonder if they are not fighting for an outworn ideal rather than a matter of expediency. Such dairymen have become more than slightly lukewarm in their support of the butter men in a battle they feel is winning nothing but consumer ill will.

Also some big merchandisers of butter and dairy products such as Kraft Cheese, and certain meat packers, who have been in the margarine field for some time, are now willing to take the position that both products should be permitted to seek their own level.

Retail grocers, two-thirds of whom do not sell margarine because of federal and state taxes, have lined up with margarine interests. With little or no butter to sell, they welcome margarine as a good substitute in grocery volume.

• **Shedding the "Oleo"**—All this is much more important in Congress—

where the final decision will be made than the fact that all the old arguments which dairy interests once used so successfully against the margarine industry have largely lost their validity.

Today's margarine, unlike the "oleo" of the last war, has the same 80% content as butter, thanks to hydrogenated vegetable oils (chiefly cottonseed and soybean), and the same 3,300 calories per lb. Nearly 90% of all margarine is "vitaminized" and contains, under government standard, 9,000 U.S. units of vitamin A—an amount equal to the year round average for butter.

• **Votes of Confidence**—Uncle Sam has shown his confidence in the product not only by giving it the 180% quota, but by serving it in the luncheon rooms of government buildings in Washington as well. Furthermore, the Food Distribution Administration bought 49,000,000 lb. of margarine the first seven months of this year more than the 40,000,000 lb. of butter that was put in storage by FDA in the same period.

Monthly production figures of the Bureau of Internal Revenue show that 1943 output has in general been about twice that of last year. However, there was a drop off in civilian consumption last spring when the first ration value left a differential of only three points between butter at eight and margarine at five. This was particularly marked in May when production dropped to 3,775,000 lb., a figure only slightly higher than May, 1942, when an output of 27,971,000 lb. merely reflected the normal seasonal slump. Historically marg-

OPA "Borrows" Army's Houston

Now in charge of OPA's rationing is Col. Bryan Houston, borrowed from the Army Service Forces for the job—but not without a bang-up fight. The colonel was filling an important spot in ASF as assistant director of the purchases division (where he headed up contract termination) when OPA's general manager, Chester Bowles, decided he was the man to succeed Paul O'Leary, ousted professor. ASF thought otherwise, but Bowles remembered that James Byrnes, Office of War Mobilization chief, had once promised him anyone he needed. He laid his demand before Byrnes and won out. And, although Col. Houston is technically on loan to OPA, the Army has slim hope of ever getting him back if he clicks in his new job.

A Texan, and a descendant of Sam Houston, the colonel was a former vice-president of the advertising firm of Young & Rubicam and a business crony of Bowles, former partner in



Benton & Bowles agency. Earlier in his career Col. Houston knocked about the oil industry, which should make him a natural for his new post since gasoline and fuel oil are about the only hot rationing items left.

Mechanical Hair Drier,* Powered with *Emerson-Electric Motor*, Dries Heaviest 'Suit' of Hair in 10 Minutes!

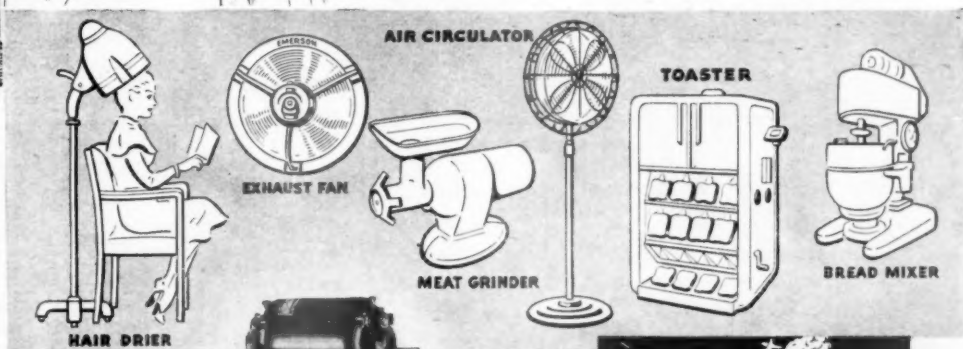
This Startling Invention of 1898 Pioneered Another Great American Industry

By the ingenious combination of a gas burner and electric motor-driven blower, heated air was forced through a pipe to the desired elevation. Women marveled at the time saved in drying their hair. The news spread, more shops were opened. Today, a nation-wide industry of equipment and supply manufacturers, distributors and beauty salons serves the women of America.

This is but one of many instances where Emerson-Electric has kept pace with the development of appliances and equipment from inception to their present-day utility.



*This device was made for Mr. A. F. Godfrey, of St. Louis, an internationally-known authority on beauty culture. An Emerson-Electric announcement of 1898 says "It will dry perfectly the heaviest suit of hair in ten minutes."



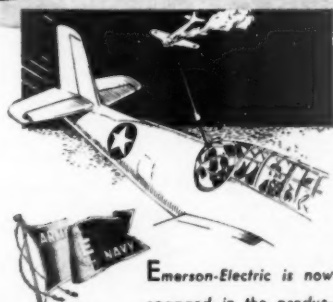
Whenever you visit "the butcher, the baker, the candlestick maker," you'll be better served by time-saving appliances, and equipment provided for your comfort, powered by Emerson-Electric motors.

The War Bonds You Buy Today Will Pay for the New Appliances and Comfort Conveniences You'll Want After Victory

The expanded war activity of Emerson-Electric has created a new and vastly enlarged field of manufacturing operations, particularly in light metals and plastics. . . . This—added to the experience of more than half a century in the precision manufacture of motors, fans, appliances, and arc welders—will be reflected in the Emerson-Electric products of the future.

"After Victory" manufacturers of new and improved motor-driven appliances and equipment will again confidently power their products with Emerson-Electric Motors, based on the latest conceptions of design, construction and efficiency.

THE EMERSON ELECTRIC MANUFACTURING COMPANY
SAINT LOUIS . . . Branches: New York • Chicago • Detroit • Los Angeles • Davenport



Emerson-Electric is now engaged in the production of power-operated revolving turrets for United Nations' Bombers, electric motors for aircraft control, shell parts—also electric fans, motors and welders authorized by government priorities.

EMERSON ELECTRIC

MOTORS • FANS • APPLIANCES • A. C. ARC WELDER



Acme for Action

Action, trigger-quick action, sets the enemy on the run as our boys land on foreign shores. And quick action on the home front in producing needed equipment will help keep the enemy on the run.

So here at Acme we constantly strive to break production records in supplying patterns, dies, heat-treated aluminum castings, and specialized tools needed by war plants to speed production of war materials.

Acme service is complete, including engineering counsel when desired. Submit your requirements without obligation.

ACME PATTERN & TOOL COMPANY, Inc.
DAYTON, OHIO

Heat-Treated Aluminum Castings—Patterns—Tools—Tool Designing—Production Processing

For VICTORY buy WAR BONDS and STAMPS

rine production falls off in the spring of the year when butter is most plentiful and least expensive.

	1942	1943
Jan.	35,109,000	61,984,000
Feb.	33,015,000	62,982,000
Mar.	30,700,000	70,045,000
Apr.	28,659,000	43,120,000
May	27,971,000	30,775,000
Jun.	27,143,000	36,062,000
Jul.	29,383,000	43,956,000
Aug.	38,495,000	53,950,000
Sep.	39,604,000	
Oct.	46,283,000	
Nov.	47,635,000	
Dec.	42,099,000	

• **Trend of Sales**—Tax stamp sales reflect the impact of ration values on civilian consumption even more directly, since government purchases naturally are tax-free. Also, the increasing quantity of margarine going into the FDA hoard is shown by the way tax stamp sales have been lagging behind total production since August of last year.

	1942	1943
Jan.	35,864,000	53,311,000
Feb.	31,800,000	50,984,000
Mar.	29,679,000	47,482,000
Apr.	26,760,000	32,363,000
May	23,081,000	20,651,000
Jun.	23,099,000	24,509,000
Jul.	22,535,000	31,082,000
Aug.	24,379,000	38,144,000
Sep.	29,537,000	
Oct.	35,403,000	
Nov.	39,371,000	
Dec.	42,151,000	

Just what the pattern of distribution is for this increased quantity of domestically consumed margarine has not been documented. But there is more than a little evidence that extensive new marketing areas have been tapped. Oklahoma last spring repealed its license fees on manufacturers, wholesalers, retailers, and restaurants (BW—Apr. 343, p44).

• **In the Dairy Stronghold**—Even in dairy-conscious Wisconsin, 69 retail licenses at \$25 each (superimposed on the federal fee) have just been issued. The state's per pound tax of 15¢ plus the federal levy force grocers to sell margarine (usually priced from 16¢ to 25¢ a lb.) at 39¢ to 42¢ which almost cancels its price advantage over butter, selling at 48¢.

A bill already has been prepared for presentation to Wisconsin's next legislative session proposing the repeal of these and the state's other levies of \$1,000 on manufacturers, \$500 on wholesalers, \$25 on restaurants, and \$5 on boarding houses.

• **No Temporizing**—The margarine industry looks to possible repeal of the federal levies as a priceless precedent when it comes to fighting the battle in the state capitols of the nation later on, but it is decidedly nervous about a suggested compromise of repeal for the duration only.

Peanuts to Petrillo

Musicians' chief is willing to settle transcription dispute cheaply because he has his eye on a bigger game.

Painfully apparent to the entertainment industry this week was the reasoning behind James C. Petrillo's willingness to accept, in behalf of the American Federation of Musicians, an agreement with the electrical transcription companies which will net him less than one-tenth of the \$3,500,000 to \$5,000,000 a year he had predicted.

Bigger Game—The A.F.M. president is stalking bigger game—the radio networks—and is eager to establish the principle of an industry's contributing to the nation's unemployment fund—a principle that is inherent in the electrical transcription contracts.

Following conclusion of a deal with Decca Records, Inc., and its transcription subsidiary, the World Broadcasting System (BW—Sep. 25 '43, p100), Empire Broadcasting Corp. accepted the same contract.

Better Contract?—Four other transcription companies—Associated Music Publishers, Lang-Worth Feature Programs, C. P. MacGregor, and Standard Radio—have concluded another contract, details of which had not been released early this week.

The new contract was understood, however, to contain terms substantially the same as those in the Decca contract. Under this, the companies would pay a certain percentage of sales to the union.

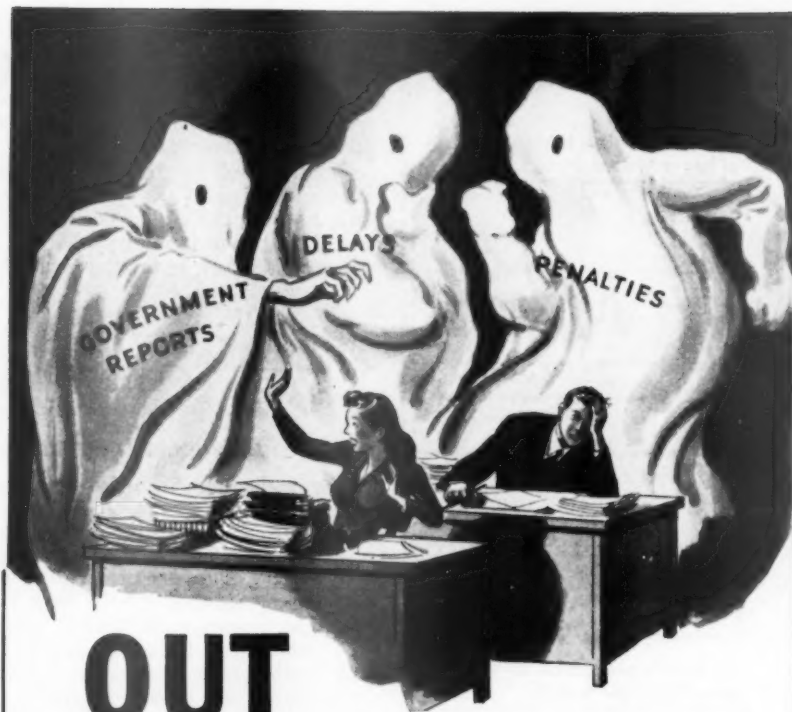
Walter Socolow, attorney for the transcription companies, indicated that the new contract gives the four companies a better deal than Decca got.

Only the transcription companies, which make recordings for broadcasting, distinguished from the phonograph record companies, have been involved in the current National War Labor Board hearings. And not all the transcription companies have made their peace with Petrillo.

NBC Unit Absent—Conspicuously absent from the new agreement this week was the Radio-Recording Division of the National Broadcasting Co., ostensibly waiting until phonograph record negotiations occur. In the eyes of the union, acceptance by NBC would bind the Radio Corp. of America's Victor phonograph record division to the union contract because they are both subsidiaries of RCA.

Actually NBC, like the Columbia Broadcasting System's Columbia recording division, shies away from accepting the contribution principle.

Gunning for the Networks—The reason is that Petrillo, having settled with



OUT

with these PAYROLL WORRIES!

When you put in a Form-Master System

Instead of copying details on three separate forms—employee's statement, payroll sheet and earnings record—one fast handwritten operation on the Form-Master completes all three at once. It cuts payroll posting time in half...gives you, as a by-product of your original entries, all the facts Governmental agencies must have.

The Form-Master will enable any clerk to complete the work correctly, without delay, and in a way that meets every State and Federal Regulation. No heavy outlay for equipment.

BRIEF EVIDENCE:

■ "...We estimate that your system is saving us approximately 50% of the time formerly used for writing payroll checks."

Brillion Iron Works, Inc.
Brillion, Wisconsin

■ "...Have been able to effect major time and money savings...Special operators are not required...Heartily recommend its use..."

Empire Ordnance Corp.
New York City

This coupon will bring you details quickly. Mail it today!



THE TODD CO., INC., Rochester 3, N. Y.
Please give me the facts about the Todd Form-Master System and how it speeds quarterly reports, cuts payroll posting time, increases accuracy and meets all State and Federal regulations.

Company Name _____

Address _____

City _____

By _____

BW-10-23-43



"BODIES" for BOMBERS

ON OCTOBER 25, 1940—more than a year before Pearl Harbor—U. S. Army Air Corps officials notified us of the urgent need for a greatly increased aircraft production program, and invited us to participate.

Already we were making Army trucks in great number, completing a huge tank arsenal, building field ranges and test heaters, and making our first studies of anti-aircraft gun manufacture.

Here was another urgent job. So without waiting to learn what aircraft job would be assigned to us, we provided 600,000 sq. ft. of additional plant space and, from our own personnel, began to select engineering, metallurgical and manufacturing specialists for this new work.

It was just three months after our first meeting with Air Corps officials

NOSES AND BODIES FOR BOMBERS (INSIDE AND OUT)



that we were notified our job was to build nose and center fuselage sections for medium bombers including installation of complete control systems.

We immediately sent forty of our technicians to a producing aircraft plant where these men did regular production work and observed, at first hand, the production methods then in use. Our long background in building automobiles and trucks, plus the experience these men gained, enabled us quickly to get under way turning out "bodies" for bombers by quantity production methods.

To help acquaint us in advance with the many kinds of material and operations involved, the Army Air Corps

sent us a bomber nose section. Our engineers and master mechanics analyzed aircraft blueprints covering more than

OVER 14,000 PARTS TO BE FORGED, CAST, STAMPED, MACHINED AND PRECISION-FITTED



fourteen thousand structural parts.

Many of the metal parts presented entirely new working characteristics. They required elaborate heat treating processes for the extreme stresses demanded of them. They also presented new problems in the design and use of the dies needed to shape them.

Our production and purchasing specialists determined which parts we could subcontract to other companies. As the work progressed, orders for parts and materials were given to 2,255 subcontractors in 309 towns, in 29 states.

Aluminum forgings would be needed in large numbers by us and other manufacturers participating in aircraft production. Therefore, we were given the job of building an aluminum forge plant. We also prepared at our foundry to produce aluminum castings for plane manufacture.

Thousands of men and women had to be trained for this new type of work. Women were employed in large numbers and carefully taught drilling, riveting, machining and assembling of aircraft parts. Automobile sheet metal workers, body builders and trimmers

were shown how to apply their experience to the production of bomber parts.

The big nose of the bomber houses the Bombardier, Pilot, Co-Pilot, Navigator and Radio Operator. Nearly all controls are here, while the center section provides the bomb carrying space.

If you could look within these sections as assembly goes on, you would

IF YOU COULD LOOK WITHIN



see a bewildering network of wires and tubing as well as the structural skeleton of the ship. Every one of these 1,963 separate wires and over 1,000 feet of tubes—to say nothing of all the control mechanisms—must operate faultlessly.

In the production of "bodies" for bombers—a new field to Chrysler Corporation—again is demonstrated how our experience in peacetime car and truck production now is being applied to the production of war equipment in quantity . . . and on time.

WAR PRODUCTS OF CHRYSLER CORPORATION

Tanks • Tank Engines • Anti-Aircraft Guns • Wide Variety of Ammunition • Bomber Fuselage Sections • Bomber Wings • Aircraft Engines • Anti-Tank Vehicles • Command Reconnaissance Cars • Troop Motor Transports • Cantonment Furnaces • Ambulances • Marine Tractors • Air Raid Sirens and Fire Fighting Equipment • Marine and Industrial Engines • Weapon Carriers • Gyro-Compasses • Powdered Metal Parts • Navy Pontoon • Harbor Tugs • Field Kitchens • Bomb Racks • Bomb Shackles • Tent Heaters • Aircraft Landing Gears • Refrigeration Compressors • and Other Important War Equipment.

In the production of this war equipment Chrysler Corporation is assisted by over 9,800 subcontractors in 956 towns in 39 states

Tune in Major Bowes Every Thursday, CBS, 9 P.M., E.W.T.

CHRYSLER CORPORATION

PLYMOUTH ☆ DODGE ☆ DE SOTO ☆ CHRYSLER

[BACK THE ATTACK . . . WITH WAR BONDS]

A PREDICTION ABOUT SPEEDI-DRI

OIL AND GREASE ABSORBENT

by

H. B. Barrett, President
BARRETT EQUIPMENT CO.
ST. LOUIS, MO.

We quote from a recent, unsolicited letter written by Mr. H. B. Barrett, President of Barrett Equipment Company:

"I thought I knew something about cleaning oily floors, but I'll admit that you showed me something that discredited my twenty-five years' experience with this problem.

"The remarkable action of SPEEDI-DRI is such that I predict it will eliminate other types of floor cleaners for oily floors as soon as it becomes sufficiently well-known."

Mr. Barrett's prediction is rapidly coming true. In thousands of war-busy plants and many safety-conscious industries, SPEEDI-DRI is doing better work more economically than any other product of its kind.

It is not only absorbing oil and grease, but is providing a non-skid surface, brightening up the plant, improving morale (especially among women workers) saving shoes from oil rot, protecting workmen's feet, saving manpower and scouring compounds.

Where else can you get so much for so little? Try SPEEDI-DRI in your plant. Prompt service from warehouse stocks in leading cities. Unlimited, priority-free supply.



Ask for demonstration . . . or free sample. If water or water-soluble oils are present, specify SOL-SPEEDI-DRI.

SPEEDI-DRI
OIL AND GREASE ABSORBENT

SUPPLIERS

East—REFINERS LUBRICATING CO.
New York 1, N. Y.

Midwest and South
WAVERLY PETROLEUM PRODUCTS CO.
Philadelphia 6, Pa.

West Coast
WAVERLY PETROLEUM PRODUCTS CO.
Russ Building, San Francisco 4, Calif.

cattlemen by the War Food Administration.

Reversal of South American hide distribution hangs on the decision of a group of government officials and American shoe and leather men now studying the British leather situation under the auspices of the Combined Production & Resources Board.

• **Manpower Troubles**—Come the hoped-for return of adequate leather supplies, shoe manufacturers will begin to feel the loss of the labor supply which has been leaving for war industry as shoe production has fallen off. Because of wage differentials, it will be hard to lure workers back into shoe-making, so that improvement in hide supplies will permit only a limited expansion in production.

Beyond over-all supply, government takings in military footwear are the controlling factor in civilian shoe production. A small reduction in leather-consuming army boots means several times that many shoes for civilians, so the assumed stabilization of government takings at just over 3,000,000 pairs a month provides perhaps the most comfort for the still far-from-barefoot civilian.

NO STAMPS NEEDED

Squeezed by New York's acute gasoline shortage, Rheingold Brewery is trying out a gas-generating wood burner as a last-ditch method of keeping its delivery fleet on the streets. Similar to South America's gasogenios (BW—Jan. 9 '43, p. 54), Rheingold's has special tanks to clean, cool, and filter the vapors before they reach the carburetor. More elaborate is a trailer-type charcoal burner (below), fueling the Chicago Tribune's test car which rolls on synthetic rubber tires made from alcohol derived from wood pulp waste liquors (BW—Jun. 26 '43, p. 94).

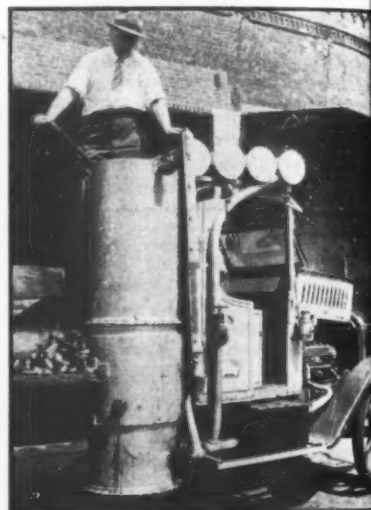
Without Redress

Emergency Court rejects Safeway petition to set aside price regulations on grounds of OPA's procrastination.

Business men who have complained about OPA's procrastination in processing formal protests against specific price orders were infuriated last week. A decision by the Emergency Court of Appeals—set up by Congress to handle complaints against OPA (BW—Oct. 9 '43, p. 14)—made it appear that they have no legal recourse.

• **Court Held Powerless**—The decision, first of its kind, involved the request of Safeway Stores, Inc., that the court grant the company relief from an assortment of price regulations because OPA's delay in giving an answer to the protests constituted a "denial." The court ruled that it is not empowered to act on a protest until OPA has actually denied it.

Since the court holds that the Emergency Price Control Act merely re-



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quires OPA to take some action (not necessarily final) within 30 days after protest is filed, Safeway contends that, in hedging and stalling, the agency can keep a case kicking around unsettled indefinitely.

Two Steps Contemplated—Safeway is ready to take two steps: (1) an appeal to the U. S. Supreme Court; (2) agitation for passage by Congress of S. 238 which has been pigeonholed in the Senate Judiciary Committee. S. 238 would require OPA to take final action on any protest within 60 days after it is filed.

OPA argues that complainants may petition the Emergency Court for a writ of mandamus directing the price administrator to take immediate action. If the action is unfavorable, the case may then be appealed to the court for its decision.

Hecht Case Review—More important than the Safeway ruling to OPA was the Supreme Court's decision to review the famous case against the Hecht Co., of Washington (D. C.) department store (BW—Dec. 26 '42, p. 16). Issue at stake in the Hecht case is whether a court should grant OPA a statutory injunction against a price violator who acted in good faith and has since amended his ways. OPA maintains that since violation is so much against the public interest that an injunction should be granted whether or not violations are deliberate.

If the Supreme Court decides for OPA, the agency thinks its hand will be greatly strengthened in enforcement proceedings.

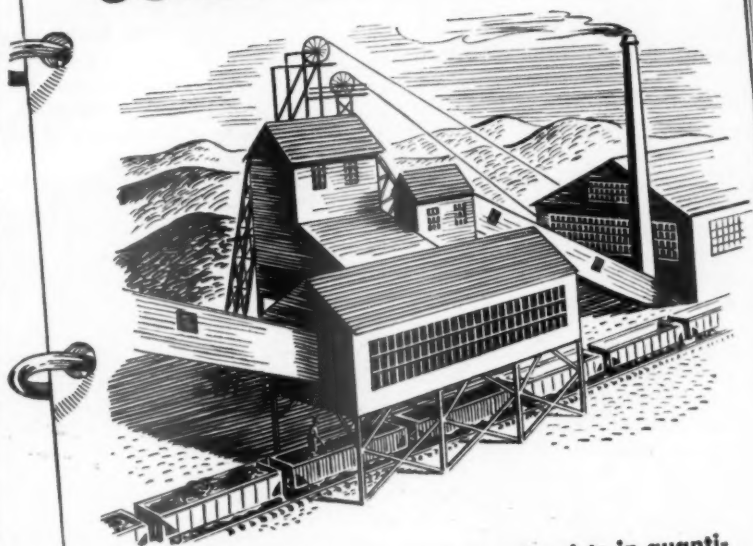
"PRESS SUBSIDY" RECAST

When Sen. Raymond E. Willis, publisher of the Steuben County (Ind.) Republican, proposed that the government appropriate between \$25,000,000 and \$30,000,000 for advertising war bond sales in the hard-pressed small cities and weeklies of the nation, there was a flood of high-minded protest in the metropolitan press (BW—Apr. 17 '43, p. 5). This week hearings began on a revised version of the bill presented by Sen. John H. Bankhead (Ala.). The principal revision provides for distribution of the Treasury's fund among large papers as well as among the small ones.

But the revision hasn't served to silence opposition. Most critics term the measure the beginning of government subsidy of the press. They argue that such a policy, once employed in the Treasury, could spread to other government agencies.

Under the revised bill, not less than half the fund would go to purchase space in daily, weekly, semiweekly, and tri-weekly newspapers which serve communities that have a population of 10,000 or less.

COAL...IN NORTH CAROLINA



"The coal is of good quality and exists in quantities sufficient to supply a large portion of the State's fuel requirements."
H. A. BRASSETT & CO.

(Internationally famous engineering firm, whose consulting engineer in coal is C. C. Morfit, regarded as one of the world's outstanding coal geologists and engineers.)

FOR the past quarter of a century a wide variety of industries seeking a profitable locality in which to operate—a stable labor supply, low-cost hydro-electric power, mild climate permitting year 'round operation and nearness to consuming markets, have located in North Carolina. The industrial growth of the state has been rapid and consistent.

Today a hitherto unrecognized advantage is unfolding—North Carolina coal, a high quality fuel that does not have to bear the heavy burden of interstate freight rates, is available.

This coal is comparable with the well known Freeport coal, and a ton, if used as a coking coal, will yield 16 gallons of tar, and ammonium sulphate, benzol and

toluol in substantial quantities.

North Carolina's coal deposits, never heretofore adequately surveyed, have come to the forefront as a result of a recent survey made by H. A. Brassert & Co., of New York, consulting engineers for the State of North Carolina.

"It will require no further cleaning preparation other than hand picking on the belt to ship a good coal from this field... the coal will be a desirable fuel for domestic, gas metallurgical and other industrial uses," reports the Brassert organization.

Address correspondence to Commerce and Industry Division, 3162 Department of Conservation and Development, Raleigh, North Carolina.

NORTH CAROLINA

LABOR

Teamsters Balk

Truck drivers say truce is only temporary after walkout in protest over NWLB's delay in dispute on base pay.

Trucking companies in six southern states were making inroads this week into an estimated jam of 1,500,000 pounds of freight that had accumulated at shipping points during a seven-day strike of drivers concluded last week end.

• **Trouble With War Agencies**—The cessation of deliveries resulted not from a union-management dispute, but from labor dissatisfaction over Office of Defense Transportation rules and a National War Labor Board policy of not speeding up the consideration of a case because strike threats are made.

AFL's Teamsters Union, which represents the drivers, has been agitating for a change in the methods of computing wages. The present system provides 24¢ a mile compensation for drivers, and before ODT took over, 50 to 60 miles an hour traveling was possible. ODT regulations now limit truck speed—ostensibly to 35 miles an hour—and the union contends that this makes it necessary to drive 35% to 40% longer to receive the same pay. The union has demanded that NWLB listen to its story and order some

other method of wage computation into effect.

• **Discontent Mounts**—NWLB, with a crowded docket, has been unable to sidetrack many cases in order to hear the 'teamsters' complaints. Discontent has been growing for months, and there have been several quickly settled minor walkouts in mid-Southern shipping centers.

Last week's major shutdown started in Atlanta when 5,000 drivers rejected the no-strike direction of their regional officers. It spread rapidly through Georgia, Alabama, Mississippi, Florida, Tennessee, and Kentucky, while a parallel walkout occurred in the St. Louis shipping hub.

• **Employers Sit Tight**—The teamsters first filed a petition for a hearing with NWLB in November, 1942. Pending action by that agency, shippers have refused to meet union demands to raise the guaranteed base from \$30.24 to \$39.20 a week.

The union advised the drivers to await NWLB's decision, which will probably be retroactive, but Atlanta members filed an intent-to-strike notice under the Connally-Smith act. The government-sponsored strike vote was easily carried, but in an indignation meeting where Connally-Smith procedure was denounced as "confusing" and "full of red tape," an immediate walkout was decided on.

• **War Shipments Halted**—Swiftly spreading from Georgia into adjoining states, the outlaw stoppage was attrib-

uted to a "coffee shop" organization created by rank-and-file drivers in defiance of union officials.

The War Dept., however, did not see that it mattered much who was behind the strike as vital war freight was piling up. Working with union officials, Army officers soon had a volunteer service of union drivers wheeling brass castings into Chattanooga and carrying other essential shipments requested by the War Dept.

• **Army Seeks Action**—Although no serious time delays in moving war material were caused by the strike, the Army could not be comfortable depending on the volunteer service. It interceded with the U. S. Conciliation Service and the employers to get joint action urging NWLB to speed up handling of the drivers' case.

Going back to their wheels last week end, and working longer hours to clear the accumulated freight, the drivers described the resumption of work as "period of grace." They meant that federal agencies didn't come through with pay boosts, another walkout was only a question of time.

Mediation Mired

Nonoperating employee rail wage case shows futility of wartime arbitration; 4¢ rise now seems indicated.

The once "model" arbitration machinery, which regulated union-management relations on the railroads so successfully that there has not been a major strike since 1926, must now be considered another casualty of the war.

That is the direct consequence of the long-run significance of President Roosevelt's action in setting up a nonoperating board to consider the wage demands of more than 1,000,000 nonoperating railway employees. This will be the second such three-man panel to go over the nonoperating wage case, first presented thirteen months ago.

• **Special Board's Decision**—The dispute over wage rates was sifted through elaborate arbitration machinery provided by the Railway Labor Act, then was handed to an emergency board which was a wartime capstone atop the regular arbitrational structure. This board recommended an 8¢-an-hour wage boost, an award which, while making neither side too happy, was acceptable to both labor and management.

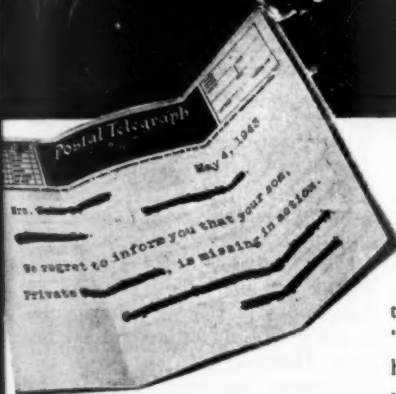
Under economic stabilization regulations, the award had to be O.K.'d by Fred M. Vinson. Maintaining that the award was inflationary, he rejected it and the President was forced to appoint a new board. The President also indicated that a 4¢-an-hour recommendation



Unlike the truck strike in other major southern cities where union volunteers kept vital war goods moving, a parallel walkout in St. Louis compelled the War Dept. to draft women

drivers to haul material to and from the local ordnance depot. Police cars convoyed the depot girls who handled ten-ton trucks although experienced only with jeeps and ambulances.

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PART 7-O-X REPORTED MISSING

Jim's mother has a telegram today. It trembles in her fingers as she reads — "missing in action"... the rest is somehow blurred. Nothing now, but to wait... and hope.

In a war plant nearby, another telegram is read. Part 7-O-X is late. Work stops. Lacking a vital part, some jeep, plane, gun or tank may never reach in time the front where Jim was fighting.

Yes, *thousands of tiny parts* make up

the war machines that kids like Jim are counting on today.

Here at R B & W, making Empire Bolts and Nuts, it's our job to make each one accurately-threaded to tighten fast and grip hard, strong to take the battering of battle, fit for the faith our fighting men must place in it. Our responsibility, too, to make it *on time*, so that no part of ours "missing in action" will mean *men* "missing in action".

You, too, may be making all-important bolts and parts" for war equipment that your makers never see. If so, this page, re-written as poster for your plant, may help them realize why every part, even the smallest, counts. Write us. The poster's free.
Russell, Burdsall & Ward Bolt and Nut Co.
Port Chester, N. Y.

R B & W *Making strong the things that make America strong*





Women... in the WAC and WAVES, the SPARs, MARINES and WASP... are performing services essential to victory. New services in the realm of financing are essential, too. Victory can't be *bought* with money... but it can't be won without it.

American industries are working miracles but there are still thousands of concerns that are not producing all they can... as fast as they can... probably because they lack adequate financing.

MORE CASH... MORE PROTECTION

Any manufacturer or wholesaler whose chief bar to greater production and sales is lack of operating cash, will get prompt and hearty response to a request for information about our new and broader financing services.

We can engineer a financing plan to make practical use of all your inactive capital dollars... and there are probably far more of them than you realize.

FINANCING, WITH LIMITED LIABILITY

We will set up a plan to put that inactive capital to work without red tape or restrictions, or interference with management, and with *limited liability* to you... one of the exceptional new features of our service you should certainly investigate.

If you want to do a bigger and more profitable business, let us analyze your needs and work out a plan for you.

Commercial Credit Company Baltimore

Subsidiaries: New York Chicago San Francisco Los Angeles Portland, Ore.

CAPITAL AND SURPLUS MORE THAN \$68,000,000

Interesting color charts of ARMY, NAVY and MARINE insignia free on request.

tion would meet with his approval and the board is not considered to have latitude to award anything else.

• **Now a Dead Letter**—As a consequence, the determination of rail wages by collective bargaining, mediation, and arbitration is a dead pigeon, and there is no valid reason for utilizing it at the present time. Unless, through strike threats or other pressure, the rail unions can force the government to accord them exceptional treatment, their rates, like other labor groups, will be set by fiat.

It already is apparent that one of the major postwar labor problems of the federal government will be to reestablish effective railway mediation machinery and vest it with the prestige that has been lost in the clumsy attempt to operate it under wartime inflation control policies.

Bonuses in Court

C.I.O.'s long-standing row with Mesta flares anew in suit charging incentives were left out in figuring time-and-a-half.

Another chapter in the stormy relations between C.I.O.'s United Steel workers of America and the Mesta Machine Co. of West Homestead, Pa., was written into the federal court records at Pittsburgh when the union brought a million-dollar action accusing the company of short-changing its employees in payment for overtime work.

• **Keyed to Incentives**—Charging that Mesta violated the federal wage-and-hour law in failing to include incentive bonus earnings of workers in computing time and a half payment for work over 40 hours a week, and seeking to recover for its members an estimated \$500,000 in under-payments plus an equal amount as liquidated damages as provided by the wage-and-hour law if time and one-half is not paid on the proper basis, the union took its animus for the company to litigation.

Mesta has never signed a contract with the C.I.O. and has never had to. Never since an organizing drive got under way in 1937 has the union been able to demonstrate that it represented a majority of Mesta workers. This has not, however, deterred it from trying to get the company to sign a C.I.O. contract.

• **Beginning of Trouble**—When the U. S. Steel Corp. entered into a written agreement with the C.I.O. in March 1937, Mesta was invited to follow suit. Its president, Lorenz M. Iverson, refused, offering instead to bargain working conditions with the union on its members only. Iverson offered to post whatever terms were agreed to on company bulletin boards. Playing



PRECARIOUS POST

Into a hot spot—head of the Fair Employment Practices Committee—moves Malcolm Ross, deputy chairman, succeeding Bishop Francis J. Haas (BW—Oct.16'43,p100). Ross, familiar both with the committee's program of preventing racial labor discrimination and with its backlog of 1,500 cases, has worked in southern coal fields with the Friends' Service Committee and for the National Labor Relations Board.

all or nothing, the C.I.O. spurned the counteroffer and called a sitdown strike in April of that year.

The sitdown ended after five hours when Iverson agreed to meet union officials and talk the matter over. Negotiations accordingly continued until Apr. 20, when Iverson left for a European business trip.

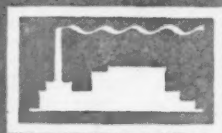
• **The Tide Turns**—Before he returned and talks could be resumed, the disastrous Little Steel strike of 1937's spring took some of the fight out of C.I.O. Up to that point, the union had been claiming a majority, but the fact that it did not petition for a National Labor Relations Board election suggests that losing the strike in the mills probably cost it support in the fabricating plants like Mesta.

But C.I.O. didn't throw in the sponge. Day-by-day organizing brought it back to a point where it felt it had enough strength to shut Mesta down, and it called a strike for Dec. 8, 1941. Early that morning, union sound trucks, driven into position to direct a first-shift walkout, boomed instead a message that every worker was to stay on the job, work harder, forget the strike. Japanese

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Pedrick

precisioneered PISTON RINGS

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planes, the day before, had begun a bigger war at Pearl Harbor.

● **Continual Wrangle**—Since then, Mesta and the C.I.O. have, for the most part, confined their feud to argument. A few months ago, there were two sit-down strikes, unauthorized by the union, which grew out of discontent over wage rates, but until the suit was filed last week there were no important wartime developments.

Frank Burke, union district director, claimed the company recently paid out to incentive workers "an extra bonus which was supposed to make up to them what it owed them from May of this year." But the union members "do not intend to permit the company to keep the money which it owes them because of the company's violation prior to May 1, 1943."

Incentive Guides

Regional labor boards and employers get a cue from NWLB on what an incentive system must do to win approval.

Members of the twelve regional war labor boards are studying, and employers will study, a new Washington document which finally sets National War Labor Board policy on incentive wage-payment plans. Lacking such a policy, the regional agencies have been holding up practically all applications for permission to change from straight-time to incentive systems. Employers have had no cue as to what standards their incentive-pay proposals must meet.

● **Seven Points**—Now NWLB Vice-Chairman George Taylor has put NWLB's directions in seven points:

(1) The basis of any incentive plan is whole-hearted acceptance by those directly affected. The board will not order an incentive system in a dispute case. It will act only upon voluntary submissions made by the employer and joined in by a union where it represents the employees.

(2) Full responsibility for the technical details of a plan and its adaptability to the needs of each situation rests with those who submit the plan.

(3) The proposed plan should not provide incentive wages to make up for wages paid below the stabilized level of Sept. 15, 1942, as defined by the National War Labor Board.

(4) The proposed plan should not involve wage decreases or wage increases, nor should it increase the general level of production costs contrary to the Act of Oct. 2, 1942, or the directive orders issued thereunder.

(5) Full data should accompany each submission in order to permit the board to appraise the basis upon which a production standard has been set and also to appraise the importance of the variable factors previously enumerated.

(6) Provision should be made for a per-

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odic review by the National War Labor Board of the results achieved under the plan as well as of the fluctuations which have occurred in the variable factors. It should be recognized that significant changes in the variable factors may require a change in the production standards applicable in the incentive plan.

(7) Since the basic purpose of the incentive plan is to effectuate a greater production per man-hour of work, each plan should be accompanied by an estimate of the effect of the plan upon the company demand for manpower, and the company should make periodic reports to the board as to man-hours per unit of production.

Case for the Navy

Constant labor trouble interrupts production at Cramp shipyard; sponsoring congressman asks Navy to take over.

"One thing is certain. We cannot afford a repetition of the Brewster situation at Cramp's."

This statement, coupled with the suggestion that the Navy consider taking over the Cramp Shipbuilding Co. Philadelphia yard, dramatically emphasized the seriousness of the labor situation at the old World War shipbuilding plant (BW—Aug. 17 '40, p17). The statement and suggestion came from one of the key sponsors of the reopening of the yard two years ago—Rep. Michael J. Bradley, congressman from Pennsylvania's third district, in which the yard is located.

• **Basic Issues Still Unsettled**—Last Monday, 15,000 members of Local 4 Industrial Union of Marine Shipbuilding Workers of America (C.I.O.), returned to work after having been on strike since the previous Friday. The strike—latest in a long series of labor troubles at the yard—was over. But nobody had any illusions that the underlying dissension was even close to being resolved.

In fact, the union gave the management just one week for settlement of all grievances. It also voted to request an investigation of the shipyard management by the Senate's Truman committee investigating the war program, charging general incompetence in production and in the handling of labor and violation of the Wagner act. "refusal to meet with the local's executive board."

• **How It Started**—The whole thing began when 2,000 outside workers failed to return to work from their luncheon period on Friday, Oct. 15. Union spokesmen said it was no strike, that the men were merely knocking off for bad weather, as is their custom.

The next morning, however, all work stopped, and demands were heard for

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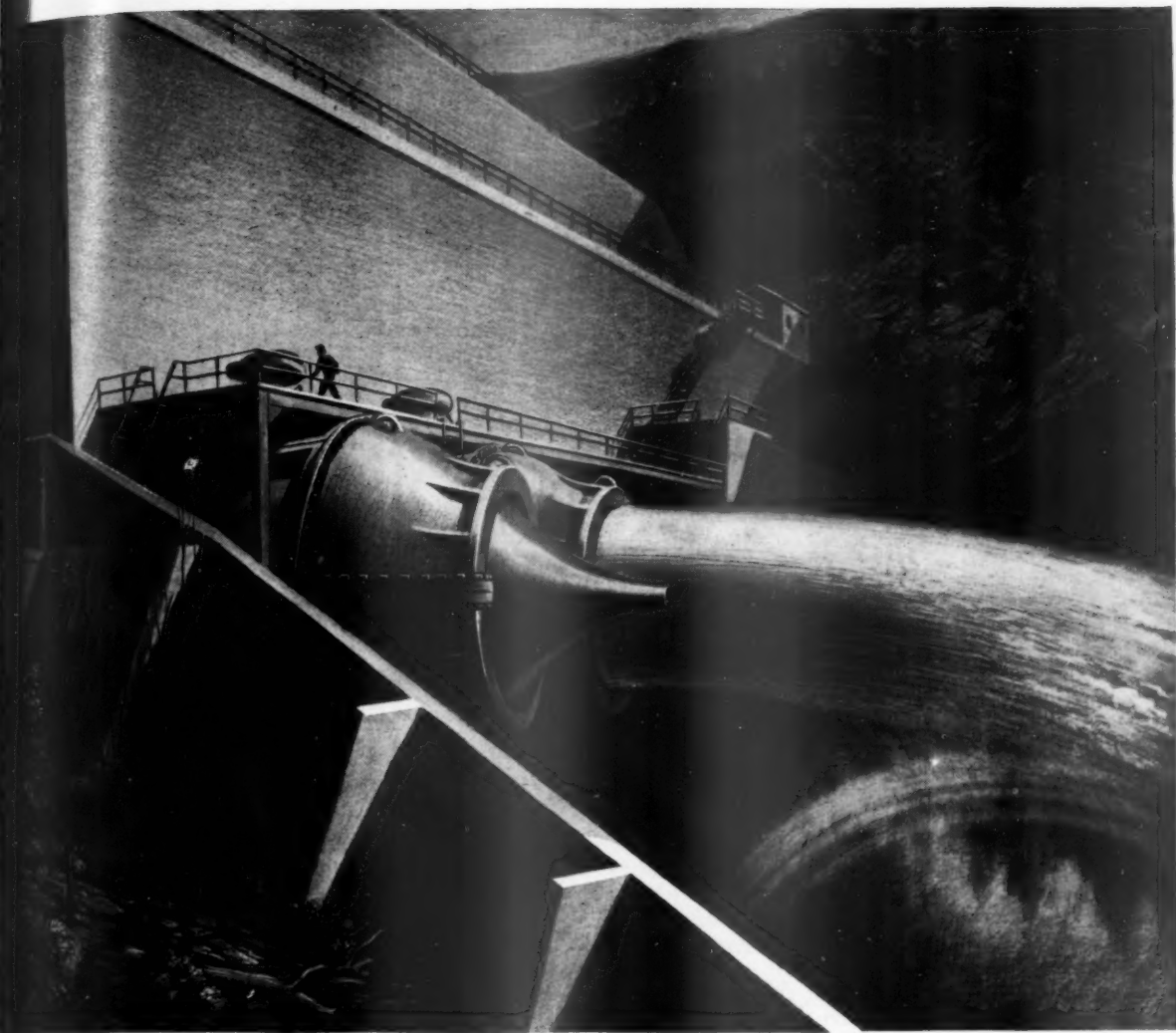
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“Rain Maker”

These, too, are Baldwins—these free discharge regulator valves that permit the release of excess rainfall impounded in flood control reservoirs. Thus, at will, man waters the earth and turns desert valleys into food bins for America. Baldwin equipment occupies an outstanding place in the water power field. Its products range from huge hydraulic turbine installations to water wheels with fractional horsepower capacities. These, in addition to check valves, surge suppressors, and other equipment for regulating the flow of water, represent the contribution which Baldwin is making to this field.

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motives, is maintaining its century-old record of service to the railroads. Over the Baldwin plants flies the Army-Navy “E” for the production of tanks, ship propellers and other ordnance materiel.



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reinstatement of Frank J. Lynch, 25-year-old member of the local's executive committee, who had been fired for instructing a \$1.20-an-hour burner to stop doing work ordinarily performed by a chipper who, on piece work, makes up to \$1.80 an hour.

• **Earlier Walkout Recalled**—The Lynch case brought to a head an issue of long standing between the company and union men. It recalled last July's walk-out of 85 men over the dismissal of 18 in a controversy over work and wages of subforemen.

There have been numerous reports of impending strikes—which never materialized—ever since the yard's reopening in October, 1941. Workers have been complaining about loafing in the yard, materials delays, and poor work allocation. Shipping men have joined the criticism with derogatory remarks about the yard's production.

• **Several Management Shifts**—There have been a number of changes in Cramp's management in the past three years. The first president, James Reed, died shortly after operations started. He was succeeded by Admiral William G. Duboise, who since has been named chairman of the board, and was succeeded as president by the incumbent, Henry E. Rossell.

Ray Won't Bounce

Boilermakers' union chief
Portland defies international
president on ouster; other local
leaders rally behind him.

If the International Brotherhood of Boilermakers is to get rid of Tommy Ray as head man of Local No. 72 at Portland, Ore., it begins to look as though the union would have to go to court or call out the marines.

He Won't Budge—White-haired Tommy this week continued as the boilermaker boss, in defiance of an ouster order issued Oct. 11 by the international president, J. A. Franklin.

"It's just like a checkers game. It's their move; there's been no charges preferred against me," insists Ray whose union in the last 2½ years has mushroomed from 500 to more than 45,000 plant workers.

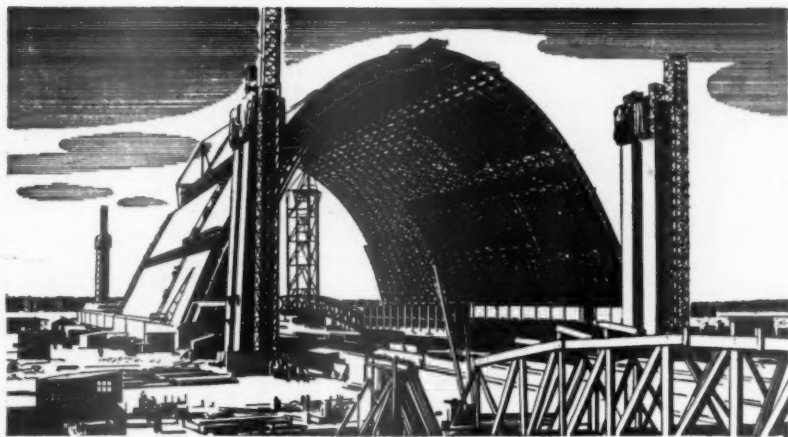
In some respects, the attempt at dismissal is just what the doctor ordered, so far as Ray is concerned. Boilermaker members and other A.F.L. unionists who recently were damning Ray now have been impelled to rally round him. If the international can come in here and chuck Tommy out, it can happen to any of us," union bigwigs reason. And they suspect, further, that the shipbuilders are trying to get Ray through the international.

What Ray Says—In his turn, Ray accuses the international of wanting to control the 400 to 500 delegates the Portland local would be entitled to send to the boilermakers' convention next January. Other than that, he refuses to be specific.

Ray, who draws \$200 a week and expenses, says he is willing to stand for reelection just as soon as a court action, instigated by a dissident group which claims to be the duly elected state of officials, is settled after Nov. 2. This is a drastic reversal, because Ray and other officials have heretofore insisted they were frozen in their jobs more than two years ago.

Right Side of Ledger—The blunt Irishman's stock never has been higher. Recently a Portland accounting firm completed a 54-month audit of his books, going clear back to the time he took the job 13 years ago. It was found that Ray had handled more than \$3,000,000 in that time, and that the union owed him \$45.

The international, through its vice-president, Otto W. Mursener of Salt Lake, who has been in Portland since January, last week discharged the union's governing committee of 21. The body, including Ray, was named last Feb. 14 when court action was threatened. The members were fired when each refused



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to abandon Ray until charges had been filed.

• **No Deference to Fact**—Ray has incurred many enmities within his own union and in the international. His refusal to hold elections, and his judgment in building the union's quarter-million-dollar "marble palace" have been questioned. He once tried to thwart the admittance of Negro workers, and he has refused to compromise any provisions of his closed-shop contracts. And, on several occasions, he has accused the management of the three Henry J. Kaiser yards in the Portland area of hoarding at least 20,000 unnecessary workers.

Total Job-Freeze

Changing of war jobs is tightened up all over nation by issuance of WMC minimum standards for hiring.

An estimated 25 million workers went to work this week under a "soft-freeze" job stabilization plan ordered into nation-wide operation by the War Manpower Commission. Affected: everybody in an essential or locally needed activity. Objectives: to eliminate turnover in such activities, reduce unnecessary labor migration, direct labor where it is most needed.

• **Required for Transfers**—The plan sets minimum standards for all areas (with

tougher regulations already in effect in such woefully tight labor areas as West Coast, Buffalo, and Louisville).

Under these standards, a job-candidate who has worked in another essential or locally needed activity in preceding 60 days may be hired only if he has been referred to the job by the United States Employment Service, or he can present a statement of availability from his last "essential" employer, under certain circumstances, in USES.

• **When "Available"**—The statement of availability should come from the previous employer if the worker has been discharged, laid off for seven days or more, would undergo undue hardship if his employment were to continue, has held employment that failed to meet pay levels or working conditions established by state or federal law regulations.

USES may issue the statement if a worker is entitled to one and his previous employer has failed to issue one or has failed to comply with War Manpower Commission regulations. Also, USES may refer him to the new job if he has been employed less than 60 days or at work that did not utilize his highest recognized skill for which there is a war need—and the new job makes better use of him.

• **USES Only**—Specific USES refer to the job—not just a statement of availability from a previous employer—is essential if the applicant is being hired for work in a critical occupation or



MARCHING WITH JOHNNY

At Newark, N. J., a C.I.O.-sponsored musical extravaganza opens Nov. 22 to portray labor's war effort, its stand on national affairs, and its subtle bid for public and military goodwill. The show—"Marching With Johnny"—is the brain-child of Leonard Keller, 33-year-old musician turned war worker, who conceived it while inspecting crankshafts (left) at a Detroit Cadillac plant. With \$50,000 worth



of approval from the C.I.O. War Relief Committee and the unofficial blessing of Washington officials, the show went into rehearsal this week under a professional director, Philip Loeb (right, standing). Unlike the Ladies Garment Worker's Union show "Pins and Needles," which grossed more than \$1,000,000, the C.I.O. show will have a Broadway cast of about 75. Profits on a nation-wide tour of legitimate stages will finance a swing of Army camps.

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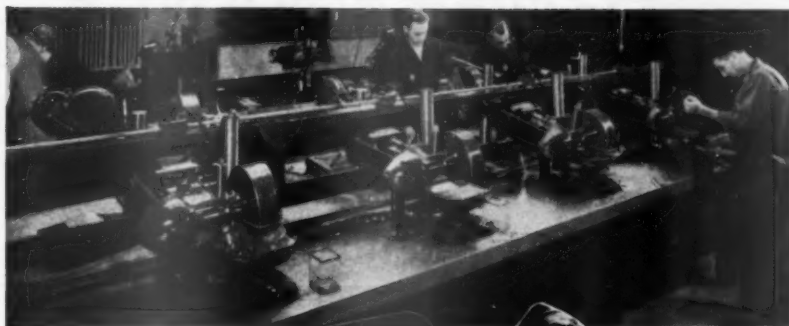
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MC Approves—When the change-
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...ees, it gave each a list of Spring-
...plants needing help.

...the Missing 369—Out of the 400,
...31 presented themselves for jobs
...where. What became of the other
...is anybody's guess, but local ob-
...ers believe they went back to their
...s, took vacations, then took new
...in neighboring towns.



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FINANCE

TWA Turns South

Airline, heretofore only a domestic operator, buys 22½% of TACA, pioneer air express carrier in Central America.

All the airlines have been talking about postwar international expansion, but Transcontinental & Western Air is doing something about it. TWA, heretofore prominent only as a domestic operator, has purchased a 22½% interest in Inter-American Airways, S.A., holding company of Lowell Yerex of TACA fame (BW—Oct. 12'40, p62).

• **No Use in Waiting**—Transcontinental & Western has had its application in for lines to London, Paris, and Hawaii. But while these hung fire with the great sheaf of those filed with the Civil Aeronautics Board by competitors, TWA turned south.

Inter-American Airways has four TACA (Transportes Aereos Centro-Americanos) subsidiaries serving Nicaragua, El Salvador, Costa Rica, and Honduras. And parts of its holdings—in addition to those sold to TWA—will be bought by Time, Inc., and Adams Express Co. (an investment trust since it dropped out of express years ago), although these two will have smaller shares than TWA.

• **Hughes' Interest**—An indirect participant will be Howard Hughes (the oil-drilling tool and movie impresario who now is a partner of the many-faceted Henry Kaiser in manufacture of flying boats) since Hughes owns about 40% of TWA's shares and is prominent in the airline's affairs.

Despite TACA's nondescript equipment (among its planes are 15 trimotor Fords, 9 single-engine Bellanca's, 3 Lockheeds, 3 bimotor Condors, and 11 of miscellaneous makes), the company has done much pioneering in transport of air cargo in Central America (BW—Oct. 31'42, p58). The concern has, as a result, pretty much sewed up the business in its territory, the 1937-41 figures (latest available) showing that TACA lines carried 93,000,000 lb. of express.

• **Ramified Interests**—But Inter-American hasn't limited its interest to Central America. It owns, for example, a 50.9% interest in a Brazilian line (in which British nationals have a 40% holding while TWA has the remaining 9.1%). A 40% interest is held, as well, in West Indian Airways Corp. (British controlled). Moreover, Inter-American has entrances to the U. S. since a CAB ruling last June gave both the Brazilian and

the El Salvador subsidiaries, as well as West Indian Airways, the right of time entry into Miami.

The company now has outstanding 76,152 shares of a preferred issue and 380,760 shares of common. Other than little information is available concerning its finances, although reports indicate that 1942 earnings ran around \$350,000.

• **Exchange of Shares**—According to present plans, Inter-American intends to change its present authorized capital to one class of stock—2,000,000 shares of a new \$1-par common. When this has been done, a portion of the latter will be issued in exchange for the present stock, on the basis of four new shares for each share of old preferred and one new share for each five old common.

When this exchange has been completed, it is said, Lowell Yerex will hold 329,010 shares; TWA 225,000; Adams Express 41,665; Time, Inc., 20,835; and Air Investors, Inc., 16,665. It is planned to sell to the public the 366,000 odd shares necessary to bring the outstanding stock to 1,000,000 shares through the Wall Street investment house of Schroder, Rockefeller & Co.

• **Bypassing the CAB**—According to reports, the agreement covering TWA's purchase of Inter-American shares specifically provides that all times Yerex to hold slightly more stock in the company than TWA. The transaction, as a result, apparently is not subject to approval of CAB, though CAB, of course, must give its O.K. before a TWA man can sit on the Inter-American board.

Of the other big domestic airlines, both American and United now control properties serving Mexico. Otherwise none has routes extending south of the border, though several lines, including Eastern and Braniff, have application before the CAB for permission to operate in the area which is now served by the TACA group.

THE INSURANCE MARKET

In trying to sell insurance today, is the agent handicapped because the market for many forms of such protection is ready at the saturation point? Not according to a survey conducted by the Curtis Publishing Co., in the planning of which a number of prominent insurance companies cooperated.

The intensive study, involving interviews with 2,374 men (living in eight cities and towns east of the Mississippi and representing a cross section of income levels), actually disclosed, for example, about half carrying no accident or health insurance. Some 90%, also, did not carry any kind of personal liability

insurance and two-thirds lacked automobile collision policies. special interest to those in the insurance business, however, is the fact the survey revealed considerable confusion in the minds of those who hold policies as to the actual policies of the fire or casualty companies issuing them. Customers in general felt favorably toward their insurance companies, especially because they thought them well managed. Almost 50%, nevertheless, urged the government should regulate insurance concerns.

Partial Peace

Investors Syndicate and enter consent decree on 16 commission charges; two come up Nov. 10.

Settlement of 14 of the 16 charges by the Securities & Exchange Commission against the Investors Syndicate and two affiliated investment companies (BW-Jul.17'43,p100) was effected in a consent decree this week. Minneapolis investment group is Feller & Co., agreeing, however, to the SEC's allegations of "gross misconduct" and "abuse of trust"; these come up for hearing Nov. 10.

Points Covered—Points disposed in the consent decree include offering of securities without approval by the SEC; offering of securities without their registration with the SEC; offering of securities without an accompanying prospectus that meets SEC requirements; making certain representations about securities, such as connection with war bonds or the implication that they are certified or approved by the SEC; making repurchase agreements with the groups own securities; relating to fraud.

Investors Syndicate points out that, in entering into the consent decree, it does admit it has been guilty of any of the practices covered. In fact, E. E. Crabb, head of the investment company, declares the net effect is simply "to remove the defendants from doing those things which are already substantially prohibited by the federal securities and investment company laws and which the companies do not intend to do irrespective of the entry of this decree."

To Avoid Litigation—Crabb points out that his companies felt it was proper to arrive at a settlement on a fair and constructive basis rather than proceed with a lawsuit which at best would be prolonged, expensive to the companies, and disturbing to security holders. And he emphasizes that solvency of the companies has not been questioned. As to the "misconduct" and "abuse"

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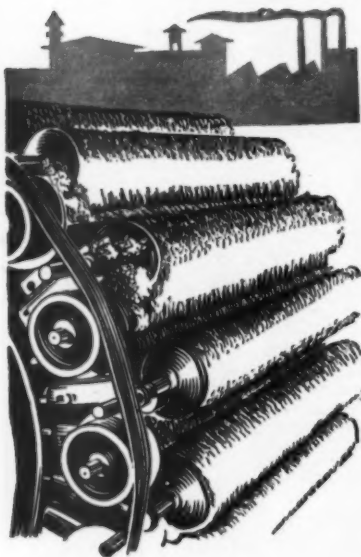
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THE MARKETS

Stocks last week for a time bumped on the previous bottoms established during the rather abrupt drop which immediately succeeded the sharp but short-lived mid-September rally. Price averages, however, did not go through those resistance levels, as so many had expected, and this factor seems to have raised some hopes that the market may, after all, have brighter days ahead. In any event, prices have been rising slowly ever since.

● **Old Enthusiasm Gone**—Volume has also been rising a bit but, as yet, only by fits and starts. In fact, since activity on the buying side has yet to equal the trading volume seen recently when stocks were having moments of real weakness, some authorities are looking at the present rally with a rather jaundiced eye.

One of the few things the Street seems to agree on currently is that the enthusiasm and confidence so responsible for the earlier 1943 bull market have long since evaporated. Moreover, the inflation fear, once such a potent market factor, is much less conspicuous than earlier.

● **Two "Positive" Schools**—Some chart readers, previously on the fence, now think they see signals indicating that resumption of the 1942-43 rise is in the offing. One investment counsel service is said to be forecasting a resumption in November of the earlier bull market.

Other equally strong predictions can be obtained on the other side. Another investment counsel service, for example, is now recommending that clients get their portfolios in an "all-out" cash position. Also, some sources say many professional trading accounts have been steadily reducing long lines and that some, in fact, are already out of the market.

● **New Offerings Go Well**—The Street, generally, firmly believes that eventually,

like last spring, a definite preference for properties over cash will again be shown. Also, brokers are impressed by the uniformly favorable reception being given October's many new financing operations and the "special offerings" on the stock exchange floor. Nevertheless, they see a very definite lack of any dynamic force in the market.

Special situations still are among a few causes of excitement. American Distilling shares offer a good example, having been, in fact, something of a sensation. Selling at only around \$25 some three weeks ago, that issue has since been climbing by leaps and bounds, rising some \$7 in the first two days of this week to come close to the \$43 level.

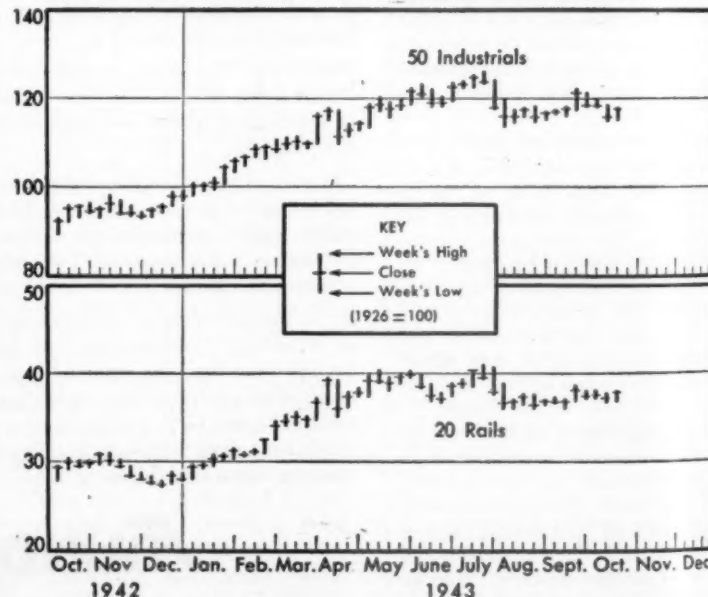
The sharp upturn was accompanied by rumors that the company might be bought out by one of the larger distilling companies because of American Distilling's relatively comfortable warehouse stocks, especially since its purchase of the T. W. Samuels distillery (BW-10-24'43, p32). The Street mentions Distillers-Seagrams as the possible buyer, citing need for additional inventory to keep dealers happy.

Security Price Averages

	This Week	Week Ago	Month Ago
Stocks			
Industrial ...	117.7	115.6	121.3
Railroad	37.8	37.2	38.2
Utility	50.9	50.2	52.0
Bonds			
Industrial ...	118.4	117.3	116.9
Railroad	98.5	98.1	98.6
Utility	115.6	115.3	115.7
U. S. Govt. ...	113.0	113.1	113.1

Data: Standard & Poor's Corp. except government bonds which are from the Federal Reserve Bank of New York.

COMMON STOCKS—A WEEKLY RECORD



Data: Standard & Poor's Corp.

charges that remain to be heard, the SEC undertook earlier to support these with allegations of misrepresentation of material facts; exaction of double loading charges; and excessive fees, deductions, and commissions. In general, the commission contends that various dealings were beneficial to one company but detrimental to the others.

Dates Back to 1940—The case is an outgrowth of passage of the Investment Company Act in 1940. Certificates sold by Investors Syndicate since 1925 (10- and 15-year instalment payment certificates bearing 3% to 5½% interest) didn't qualify under this law.

Two subsidiaries—Investors Mutual and Investors Syndicate of America—were formed to issue certificates that were similar but which would qualify. And to reduce the amount of Investors Syndicate certificates outstanding (they were burdensome because interest on the company's own investments was declining), the SEC asserts a special offer was made to holders to induce them to exchange for securities of the new subsidiaries. The SEC's charges hinge on the nature of this transaction.

After 150 Years

One of oldest U. S. firms, founded by Alexander Hamilton and always tax free, will be sold to New Jersey city.

The Society for Establishing Useful Enterprises is unusual in many ways. It is one of the country's oldest corporations, dating back to 1791. It was founded by Alexander Hamilton. And it never has paid any local taxes, thanks to an ancient and extravagant charter which was issued by the state of New Jersey.

City to Take Over—But this tax immunity has finally proved its undoing. The city of Paterson, home of most of the society's endeavors in modern times, has arranged to buy it out.

Today, the principal activity of the Society for Establishing, etc., is generation and distribution of electric energy in the Paterson area. Under an arrangement approved by Chancery Court and the legislature, Paterson will launch municipal ownership of light and power by purchasing physical assets recently assessed at \$1,387,500 (reputedly worth about \$4,000,000) for \$450,000. Other properties, chiefly eight factory buildings, the city presumably will undertake to dispose of to tax-paying industries.

Hamilton's Idea—The society owes its existence to Hamilton's interest in building home industry (Britain had discouraged industrialization of the colonies). In 1791, while serving as Secretary of

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the Treasury, Hamilton wrote his famous Report on Manufactures. The suiting action to the word, he organized the Society for Establishing Useful Enterprises.

Hamilton even wrote his own prospectus soliciting subscriptions to the \$500,000 authorized capital. He advised investors that the society contemplated the manufacture of a wide range of products, including paper; textiles, from cloth and carpets to diapers and thread; women's shoes; pottery and earthenware; and even brass and iron wire.

● Considerations As to Site—He selected New Jersey as the location for the enterprise because "it is thickly populated . . . provisions are . . . abundant and cheap" and because (important then as now) "the State . . . can feel the impulse of no supposed international hostility to the advancement of manufactures."

Locations on the Delaware River were first considered since there "the Labour of an able bodied Man was obtainable . . . at from 25 to 28 Pounds per annum" and women at "from 7 to 8 Pounds." However, the Great Falls of the Passaic River, where there was a sheer drop of 70 feet, abundant wood, equally cheap labor and living ("beef & mutton at 3d and 4 pence per Lb.") was finally chosen.

● Governor Honored—In November, 1791, the society received its special charter from the State of New Jersey. In 1792, it established the town of Paterson, named after New Jersey's governor, and by 1793, following completion of necessary dams and reservoirs, the company's first cotton mill began output.

However, activities subsequently lagged. Similar undertakings, opened decades later, made New England into one of the nation's busiest manufacturing areas. Life was pumped into the society in the early 1800's, but it was never destined to achieve in full the goals aimed at by Hamilton.

● Business Changes—The society, in fact, soon abandoned manufacturing activities, confining its operations to the development of its real estate and water-power interests. When water wheels went out of fashion as the main source of industrial motive power, the company wasn't slow in erecting hydroelectric and steam generating plants.

For many years, it has been primarily an electric power utility, although it still owns an old system of raceways, used in years past to carry water power to mills remote from the falls; eight factory buildings; and nineteen parcels of unimproved real estate plus valuable riparian rights on the Passaic River and its tributaries.

For some time, control of the society has been held by the New Jersey General Security Co. which now announces plans for sale and dissolution.

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